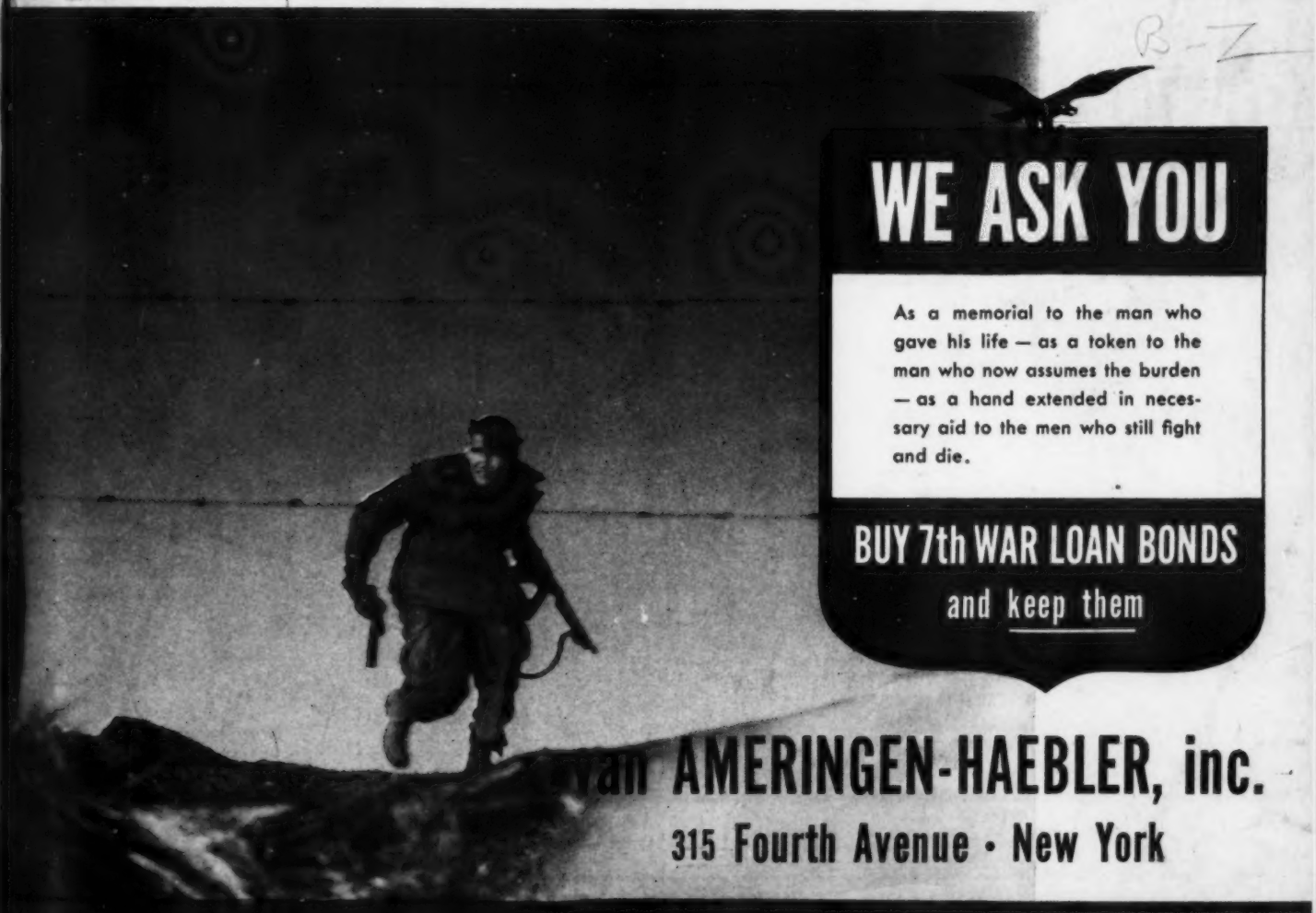
SOAP

SANITARY CHEMICALS



WE ASK YOU

As a memorial to the man who gave his life — as a token to the man who now assumes the burden — as a hand extended in necessary aid to the men who still fight and die.

BUY 7th WAR LOAN BONDS
and keep them

Van AMERINGEN-HAEBLER, inc.
315 Fourth Avenue · New York


ESTABLISHED 1798
D&O

Ring the bell with odors that have real Sales Appeal. A wide range of Aromatic Chemicals and Essential Oils from which we particularly call your attention to the following:

For Soaps
For Powders
For Creams

Prompt attention to requests on your firm's letterhead for samples and further information

Cyclamal
Iso Butyl Furyl Propionate
Vanillin
Veratraldehyde
Phenol Acetaldehyde dimethyl Acetal
Eugenol
Iso Eugenol
Nerolin Bromelia
Yara Yara
Ionone A. B.
Ionone Methyl
Hydratropic Aldehyde
Para Methyl Hydratropic Aldehyde
Para Cresyl Caprylate
Floranol

Aromatic Chemicals of Utmost Purity at Right Prices

Aromatics Division

GENERAL DRUG COMPANY

125 Barclay St., New York 7, N. Y.

9 S. CLINTON STREET, CHICAGO 6 — 1019 ELLIOTT ST., W., WINDSOR, ONT.

Volume XXI Number 6

SOAP and SANITARY CHEMICALS

Reg. U. S. Pat. Office

JUNE
1945

SANITARY Products Section, which forms a part of every issue of SOAP, begins on page 87.

MEMBER AUDIT BUREAU OF CIRCULATIONS

Contents

Published monthly by

MAC NAIR-DORLAND COMPANY, INC.
254 WEST 31st STREET, NEW YORK 1, N. Y.

Subscription rate, $3.00 per year. Foreign, including Canadian, $4.00. Copy closing dates—22nd of month preceding month of issue for reading matter and 10th of month preceding month of issue for display advertising. Reentered as second-class matter, Feb. 9, 1938, at Post Office, New York, under act of March 3, 1879. Mail circulation May, 1945, 4174 copies. Total circulation 4200.

Another New Westvaco CHEMICALS Product

FOSKLOR

(Chlorinated Tri sodium Phosphate)

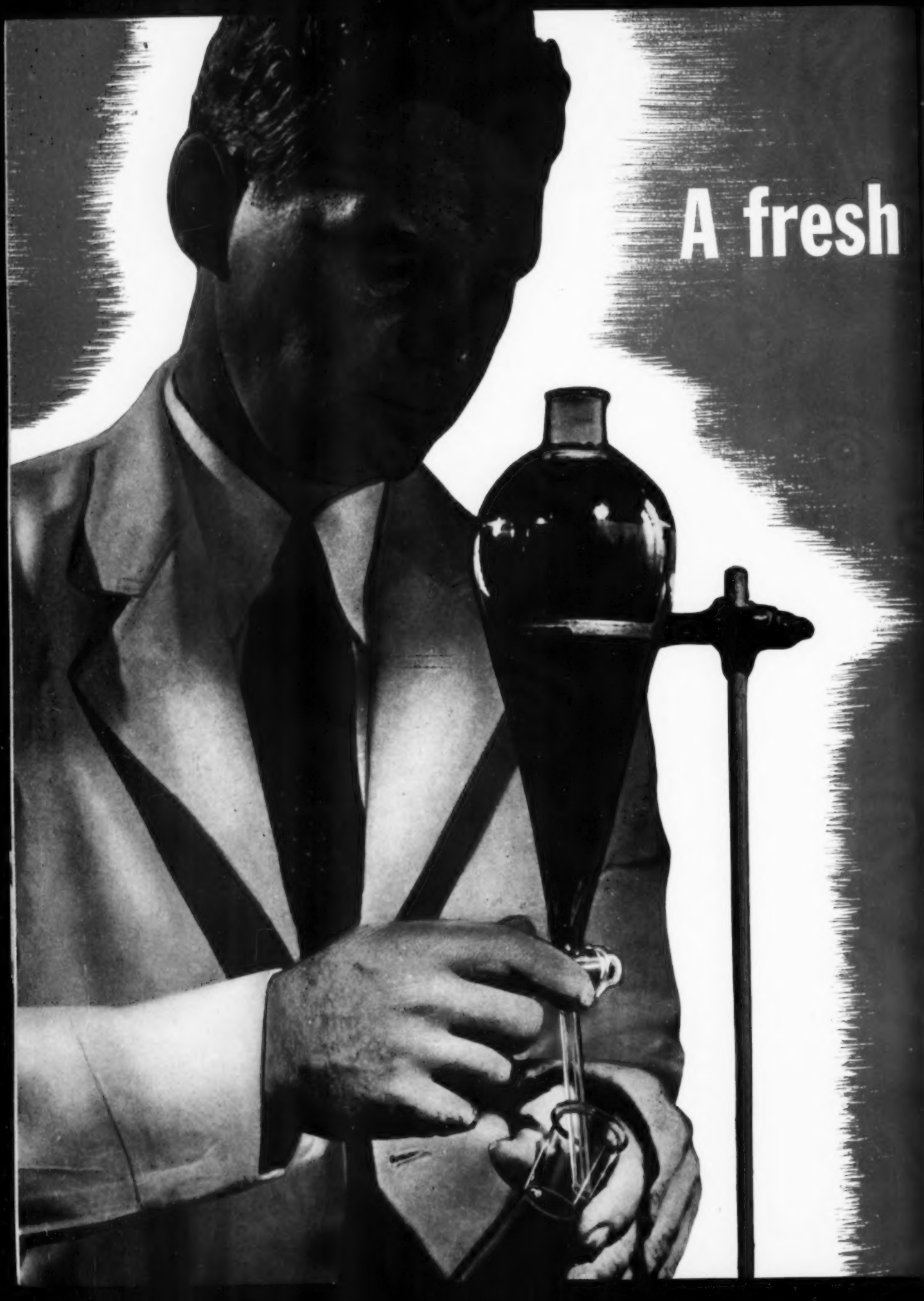
BACTERICIDE GERMICIDE
DEODORANT DISINFECTANT
BLEACHING AGENT WATER SOFTENER

Attractively packaged and attractively priced. Available in cases of 12 two-pound jars; cases of 4 twelve-pound cartons; 100 lb. drums and 350 lb. drums all with informative 3-color labels carrying data on uses and solution strengths.

Immediate delivery.

WE INVITE JOBBER DISTRIBUTION— WRITE, WIRE OR PHONE FOR DETAILS

WESTVACO CHLORINE PRODUCTS CORPORATION
405 LEXINGTON AVENUE • NEW YORK 17, N. Y. • MU 9-4920
141 WEST JACKSON BLVD. CHICAGO 4, ILL. • WABASH 7554
WOODSIDE BUILDING GREENVILLE S.C. • GREENVILLE 5702
NEWARK CALIFORNIA • SAN MATEO 3 3234


A fresh

point-of-view

on the aromatics picture . . .

WITH PERSPECTIVE BY *Givaudan*

Already the picture of new and improved perfume and cosmetic products is taking shape. For example, certain of the materials developed by Givaudan to meet wartime needs show promise of interesting peacetime developments in new formulations. Also a gradual renewal of long-curtailed supplies of many time-proven constituents will assure a basis for broad range planning ahead. With this background and with greatly expanded laboratory facilities, Givaudan envisions dramatic innovations and improvements. We look forward to helping you create new effects in your products.

"BUY WISELY . . . BUY GIVAUDAN"

Givaudan-Delawanna INC.

330 WEST 42nd STREET · NEW YORK 18, N. Y.

YOUR PRODUCT *lives* IN GLASS

LIKE rare, effervescent champagne bubbling in a sparkling goblet, your product comes alive in the crystal clarity of Maryland bottles and jars. If your postwar plans include repackaging, we will be glad to send you samples of the smart stock designs in Maryland Glass.

PACK TO ATTRACT IN *Maryland Glass*

MARYLAND GLASS CORPORATION, BALTIMORE . . . 270 Broadway, New York 7 . . . Berman Bros., Inc., 1501 S. Laflin St., Chicago 8 . . . H. A. Baumstark, 4030 Chouteau Ave., St. Louis 10 . . . J. E. McLaughlin, 401 Lock St., Cincinnati 2 . . . Owens-Illinois Glass Co., Pacific Coast Division, 135 Stockton St., San Francisco 19 . . . Aller Todd, 1224 Union Avenue, Kansas City 7 . . . S. Walter Scott, 608 McCall Building, Memphis 3.

"...and, Gentlemen, speaking of postwar packaging...

COATED LITHWITE IS GOING TO PUT MORE EYE-APPEAL AND BUY-APPEAL INTO OUR CARTONS"

SIX YEARS AGO, when Gardner-Richardson introduced *Coated* Lithwite, it caused a sensation. Here for the first time was a fine paperboard — formed, made and coated in one single high-speed operation.

SALESMEN, RETAILERS, CONSUMERS give it a big okay, for *Coated* Lithwite is brighter, more eye-appealing. Colors come up with greater brilliance on its smooth, velvety, chalk-free surface. Halftones print with sharp realism.

PRODUCTION ENGINEERS also give *Coated* Lithwite folding cartons a big okay. Precision-made for precision filling machines—*Coated* Lithwite cartons speed through with fewer jam-ups or delays. Score accurately without flaking or shattering. Take a positive seal.

CLIP THIS! **File this Coated Lithwite memo for reference when this quality paperboard is again available.**

1. Made by a revolutionary process. Coated Lithwite is the brighter, whiter paperboard that is formed, made and coated in one high-speed operation. Proved and improved for six years.

2. Means more eye-appealing cartons. Coated Lithwite's smooth, velvety, chalk-free surface forms a better base for printing inks and plates—reproduces even the smallest type cleanly, crisply. Brings colors up brilliantly—gives halftones a sharp realism.

3. Fewer jammers and leakers. Coated Lithwite scores without flaking or shattering. Takes a positive, tight seal.

The Gardner-Richardson Co.

Manufacturers of Folding Cartons and Boxboard
MIDDLETOWN, OHIO

Sales Representatives in Principal Cities: PHILADELPHIA • CLEVELAND • CHICAGO • ST. LOUIS • NEW YORK • BOSTON • PITTSBURGH • DETROIT

America's No. 1 Choice Because It's 5 WAYS BETTER

MALMSTROM · NIMCO BRAND · LANOLIN

TRUE, Lanolin is on allocation today . . . but there are *no* restrictions on experimentation with Lanolin.

Your chemists are free to dabble to their heart's content with samples that we'll be glad to supply. And there's no charge either for the Lanolin *know-how* which has made Malmstrom *"America's Largest Supplier of Lanolin and other grades of Wool Fat."*

To get the jump on tomorrow, start experimenting today with Malmstrom's NIMCO BRAND Lanolin.

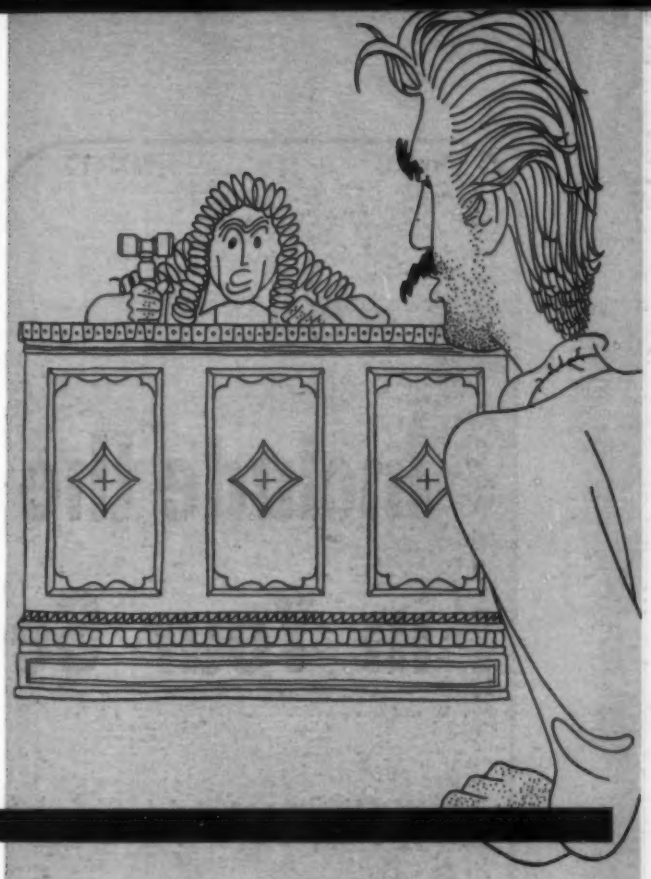
N. I. MALMSTROM & CO.

America's Largest Suppliers of { **LANOLIN** • Anhydrous U.S.P. • Hydrous U.S.P. • Absorption Base • Technical
DEGRAS • Neutral and Common • Wool Greases

147 LOMBARDY STREET • BROOKLYN, NEW YORK

F A M O U S

Caustic Comments



An accused criminal stood before the court. He smirked at the judge, Lord Bacon, and pleaded, "Your Highness ought to let me free. You and I are really relatives. You see, my name's Hogg, and Hogg's kin to Bacon."

"Not until it's hung," was Lord Bacon's caustic reply.

Dow

ONE OF MANY DOW CHEMICALS USED BY AMERICAN INDUSTRY

Caustic Soda

We have a *CAUSTIC* message also:

To satisfy industry's constant need for Caustic Soda and other heavy chemicals, manufacturers have come to depend on Dow. Quick shipment is assured by Dow's three plants strategically located in California, Texas and Michigan.

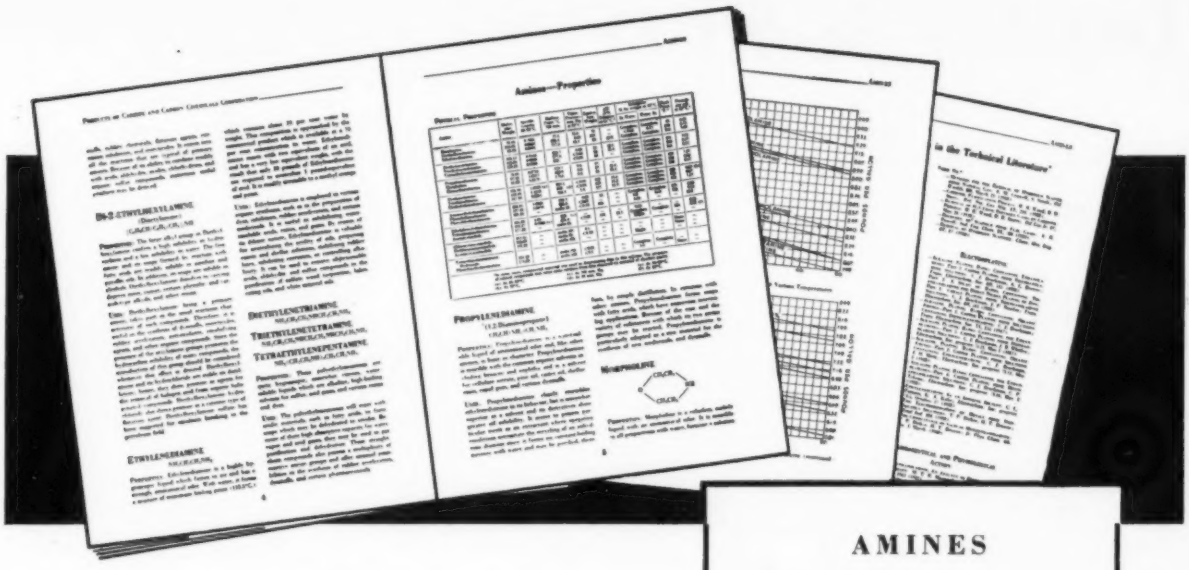
Dow Technical Advisory Service Available

THE DOW CHEMICAL COMPANY, MIDLAND, MICHIGAN

New York • Boston • Philadelphia • Washington • Cleveland • Detroit • Chicago
St. Louis • Houston • San Francisco • Los Angeles • Seattle

DOW

CHEMICALS INDISPENSABLE TO INDUSTRY AND VICTORY



"AMINES"

This booklet is crammed with useful information about these interesting compounds

THE 25 amines produced on a commercial scale by Carbide and Carbon Chemicals Corporation are used in emulsifiers for polishes, cosmetics, insecticides, and cutting oils. They are also used as carbon-removers, corrosion-inhibitors, and acid gas absorbents, and as intermediates in the production of dyes, detergents, photographic compounds, rubber products, and certain pharmaceuticals.

Included in the booklet are general descriptions, physical properties (including graphs), specifications, and applications of these important chemical raw materials, as well as helpful bibliography.

You can have a copy of the booklet, "Amines," by writing for it. There is no obligation. Similar booklets are available on "Glycols," "Organic Acids," and "Columbia Activated Carbon." We will be glad to send you a copy of whichever ones you need.

Buy United States War Bonds and Stamps

AMINES

Ethylenediamine
Diethylenetriamine
Triethylenetetramine
Tetraethylenepentamine
Propylenediamine

•

Monoethanolamine
Diethanolamine
Triethanolamine
Methyldiethanolamine
Dimethylethanolamine
Diethylethanolamine
Aminoethylethanolamine
Phenylethanolamine
Phenyldiethanolamine
Ethylphenylethanolamine
Triisopropanolamine
Tetraethanolammonium Hydroxide

•

Butylamine
Diethylhexylamine

•

Acetoacetanilide
Chloracetoacetanilide
Dichloracetoacetanilide
Acetoacet-o-toluidide

•

Morpholine
Phenylmethylpyrazolone

CARBIDE AND CARBON CHEMICALS CORPORATION
Unit of Union Carbide and Carbon Corporation
UCC
30 East 42nd Street, New York 17, N. Y.

SYNTHETIC ORGANIC CHEMICALS

Keep Your Quality Up with

Hooker Quality Chemicals

Below are listed some of the Hooker chemicals that are helping chemists in the soap and sanitary chemicals fields maintain prewar quality standards.
That's because there has been no deterioration in Hooker quality. There may be limitations on the quantities of Hooker chemicals available right now, but when you do get your shipment, you can be sure it is of the same uniform high quality you have always received from Hooker. More complete information on these and other Hooker chemicals is available when requested on your letterhead. Hooker's technical staff is also ready now, as always, to give you help in the use of Hooker chemicals.

PRODUCT Chemical Formula Molecular Weight	*DESCRIPTION*	*SUGGESTED USES*
Benzoate of Soda--USP C_6H_5COONa; 144.0	White, odorless, crystalline solid	Antiseptic in pharmaceutical and medicinal preparations, in tooth pastes and powders.
Benzoic Acid--USP C_6H_5COOH; 122.1	White crystalline material	Ingredient of cosmetic creams, lotions and other pharmaceutical preparations; antiseptics, dentifrices, dyestuff intermediates. Manufacture perfumes and pharmaceuticals.
Cyclohexanol (Hexahydro Phenol) $C_6H_{11}OH$; 100.1	Clear, colorless liquid with pleasant, aromatic odor. Sp. Gr. 0.962. Boiling Range High Grade, 158° to 162°C, Tech. Grade, 155° to 165°C.	In manufacture of disinfectants, germicides and insecticides. Solvent for resins, metallic soaps, dyes, vegetable, essential and mineral oils. Effective blending agent in soaps, aid in emulsions and solution stabilizing.
Methyl Benzoate (Niobe Oil) $C_6H_5COOCH_3$; 136.1	Clear, colorless liquid with odor resembling oil of wintergreen. Sp. Gr. 1.0930. Boiling Range 2°C including 199°C.	Deodorizing material for soaps and in manufacture of perfumes.
Methyl Cyclohexanol (Hexahydro Cresol) $CH_3C_6H_{10}OH$; 114.1	Slightly viscous straw colored, neutral liquid which becomes glasslike when cooled below room temperatures. A mixture of ortho, meta, and para-isomers. Sp. Gr. 0.924±.003 Boiling Range 155° to 180°C.	Perfume in soaps and to incorporate solvents and phenolic insecticides; solvent.
Orthodichlorbenzene (1:2 Dichlorbenzene) $C_6H_4Cl_2$; 147	Clear, colorless liquid. Sp. Gr. 1.310 ± .005 Boiling Range 10°C Max. including 180°C.	Insecticide, solvent for natural and synthetic gums, tars, grease, oil, fats. Ingredient of metal polishes, paint and varnish removers. Manufacture of pyrocatechin dye intermediates, synthetic organics.
Sulfur Dichloride SCl_2; 103	Dark brown or reddish liquid. Sp. Gr. 1.638±.005 Decomposes above 40°C. 66% Min. Cl_2 content.	Chlorinating agent, in manufacture of organic acid anhydrides and in organic synthesis.
Sulfur Monochloride S_2Cl_2; 135	Yellow to slightly reddish liquid. Sp. Gr. 1.690±.005 B. P. 138°C. 50% Min. Cl_2 content.	Manufacture of insecticides, linseed oil substitutes, dye intermediates, pharmaceuticals, organic acid chlorides.

Caustic Soda — **Sodium Sulfide**

Paradichlorbenzene — **Ferric Chloride**

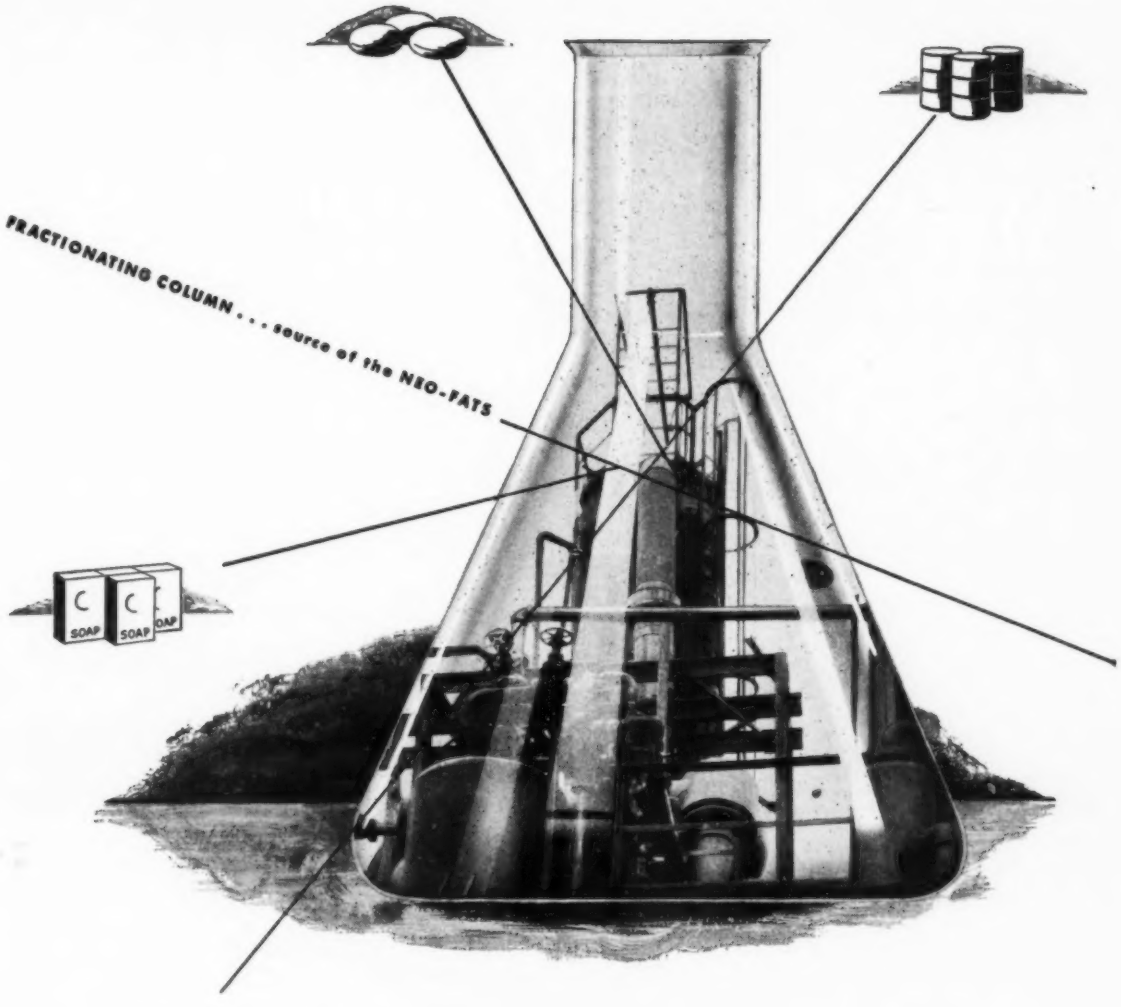
Chlorine — **Sodium Sulfhydrate**

HOOKER CHEMICALS

HOOKER ELECTROCHEMICAL COMPANY

Buffalo Ave. at Union St., Niagara Falls, New York

NEW YORK, N. Y. • WILMINGTON, CALIF. • TACOMA, WASH.



From the **NEO-FATS** *better Soaps . . . greater profits*

With the Neo-Fats, saponification is several times as fast as with neutral fats. So without materially increasing overhead costs, your present equipment should at least double your volume of top quality soap.

And you can be sure of a consistently higher soap yield for each pound of fat base. The Neo-Fats as received are 100% usable . . . they require no further processing or refining. There's no waste!

What's more, use of the Neo-Fats means a more uniform, more neutral soap . . . saponification is complete. Armour's rigid chemical controls assure uniform high quality in the Neo-Fats . . . quality that is unmatched by the natural fats.

You'll find it worthwhile to consider the quality products and operating economies made possible by the Neo-Fats.

May we send you complete details?

ARMOUR CHEMICAL DIVISION

ARMOUR AND COMPANY

1355 WEST 31ST STREET • CHICAGO 9, ILLINOIS

Efficient New Disinfectants, Wetting Agents and Detergents

HYAMINES ★ TRITONS

• The TRITONS are a group of highly efficient surface-active compounds possessing excellent detergent, emulsifying, wetting and dispersing properties. They are useful in a wide range of applications—cleansing compounds, wax emulsions, polishes, shampoos and similar formulations.

The HYAMINES are quaternary ammonium salts combining high bactericidal efficiency with low toxicity to warm-blooded animals. They make possible the formulation of powerful, colorless, non-irritating and non-corrosive germicides and disinfectants, free from odor and of pronounced stability. The HYAMINES are particularly valuable in general sanitation in restaurants, dairies, hospitals, laundries, hotels; in canning and food processing plants; and many other industries.

For additional information on these products, write or call our nearest office—Philadelphia, Chicago, Kansas City, Mo., Oakland and South Gate, California.

TRITON and HYAMINE *are trade-marks, Reg. U. S. Pat. Off.*

ROHM & HAAS COMPANY

WASHINGTON SQUARE, PHILADELPHIA 5, PA.

Manufacturers of Chemicals including Synthetic Insecticides . . . Fungicides . . . Plastics . . . Enzymes . . . Chemicals for the Leather, Textile and other Industries

Penetration is Vital in Selling the Hospital Field

The circulation given your advertising message in the hospital market must have depth as well as breadth. So many factors enter into the purchase of the great variety of equipment, supplies and services bought by hospitals that it is essential to sell all of them.

HOSPITAL MANAGEMENT provides this "circulation in depth", since in 75% of the institutions where it is received copies are routed from one department head to another in a manner similar to that illustrated at the left. This is the routing of the two copies which go to Jamaica Hospital, Jamaica, New York, as described to us by superintendent Francis C. Leupold.

After being circulated to these important members of the hospital's staff, the two copies are filed for permanent keeping, one in the office of the superintendent and the other in the office of the directress of nurses.

Thus the technicians whose advice must be sought when purchases are contemplated, have been conditioned beforehand. They are familiar with the advantages you have to offer and since they are the ones who will use the equipment or services you sell, their opinions carry much weight. Hospitals are such complex institutions that the administrative head who is empowered to sign the order must seek the advice of his specialists.

Month after month articles of great value to individual department heads of hospitals assure their continuing interest in material which contributes to the overall benefit of the hospital and the patients it serves. This partially explains our 213% gain in advertising and 31% gain in circulation recorded in the last four years. Let us give you the complete details of our really remarkable story.

For Detailed Reference Data See THE MARKET DATA BOOK Business Publications Edition

Hospital Management

The Only Hospital Publication which is a member of both the ABC and ABP.

100 E. OHIO STREET, CHICAGO 11

"NINE-LEAGUE BOOTS FOR PQ DELIVERIES"

Sure, your contract with PQ specifies deliveries from the Works nearest to your manufacturing plant, and that's the point from which we do all in our power to ship your requirements.

Critical shortage periods such as at present, however, interrupt normal processes. PQ strives to fulfill even beyond "the letter of the agreement". Perhaps you have experienced this advantage by having your order shipped from one of our more distant plants.

Nine silicate producing plants are strategically located to serve PQ customers.

PHILADELPHIA QUARTZ COMPANY

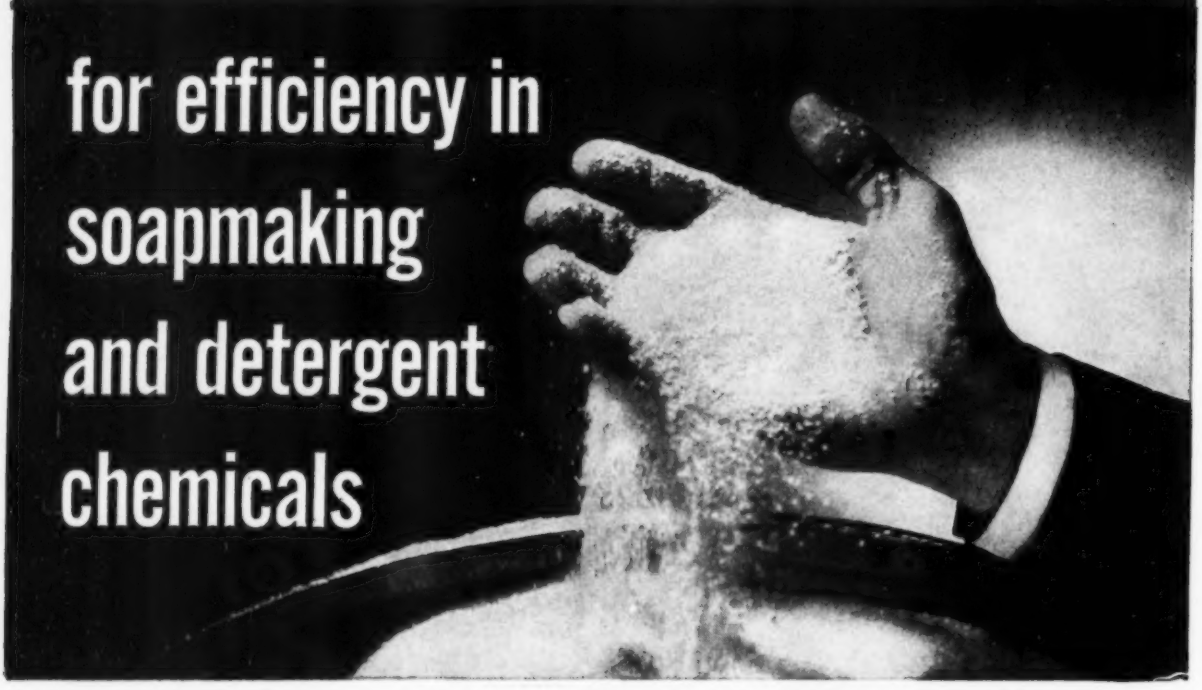
Dept. B, 129 South Third Street, Phila. 6, Pa.
Chicago Sales Office: 205 West Wacker Drive

PQ SILICATES OF SODA

WORKS: Anderson, Ind. • Baltimore, Md. • Chester, Pa. • Gardenville, N. Y. • Jeffersonville, Ind. • Kansas City, Kans. • Rahway, N. J. • St. Louis, Mo. • Utica, Ill.

SPECIFY "GENERAL CHEMICAL"

for efficiency in soapmaking and detergent chemicals



IMPROVED high quality soaps are required for efficient cleansing of new paints . . . new materials . . . new finishes. General Chemical products are valuable aids in the manufacture of such soaps and cleansers. These quality soapmaking and detergent chemicals are produced under exacting control conditions to achieve uniformity . . . quality . . . reliability.

★ **Sodium Metasilicate** . . . A definite aid in wetting. It has a high pH, is a "buffered cleanser," suspends dirt, and softens water. Easier and safer to handle than caustic.

★ **Trisodium Phosphate** . . . General Chemical Trisodium Phosphate emulsifies oils and greases, removes dirt quickly and thoroughly. It is a good water softener and soap builder, and is extremely economical. Available in four grade sizes—fine, standard, medium, coarse.

★ **Tetrasodium Pyrophosphate** . . . helps build more abundant suds . . . washes clothes whiter . . . steps up cleansing action of soaps. Keeps iron salts in solution, prevents formation of "rings," helps eliminate scale formation in machine washers, and allows an increase in percentage of builders. TSPP, Anhydrous is for the soap manufacturer. TSPP, Diamond Grade is particularly suited for incorporation into detergent mixtures.

★ **Sodium Bifluoride** . . . effective laundry sour. Neutralizes the last traces of soap; removes rust stains from textiles.

★ **Sodium Silicate Solution** . . . Available in a number of grades and strengths ranging from 38° to 60° Baumé. Shipped in steel drums of 55 and 110 gallons, as well as in tank cars.

BASIC CHEMICALS

GENERAL CHEMICAL COMPANY

FOR AMERICAN INDUSTRY

Specify These General Chemical Products, Too

Sulfuric Acid • Muriatic Acid • Acetic Acid • Sodium Sulfite • Oxalic Acid Sodium Bisulfite • Sodium Sulfate • Aluminum Sulfate • Aluminum Chloride Disodium Phosphate

GENERAL CHEMICAL COMPANY

40 RECTOR STREET, NEW YORK 6, N. Y.

Sales and Technical Service Offices: **Atlanta • Baltimore • Boston • Bridgeport (Conn.) Buffalo • Charlotte (N. C.) • Chicago • Cleveland • Denver • Detroit • Houston • Kansas City • Los Angeles • Minneapolis • New York • Philadelphia • Pittsburgh • Providence (R. I.) San Francisco • Seattle • St. Louis • Utica (N. Y.) • Wenatchee • Yakima (Wash.)**

In Wisconsin: General Chemical Wisconsin Corporation, Milwaukee, Wis.

In Canada: The Nichols Chemical Company, Limited • Montreal • Toronto • Vancouver

depend on dupont

METHYL RHODIONE SUPRA

Need a mellow note to tone a honey-sweet perfume? A variant for your delicate rose, a "green" effect for muguet? Or a masculine, precious-wood and freshly-tanned-leather note? Methyl Rhodione Supra offers all these.

Du Pont Methyl Rhodione Supra is a definite chemical entity . . . not a perfume compound. Besides its elusive woody note, it has a capacity for fusing opposing fragrances which makes it the ideal blender for almost all perfume types.

Discover Methyl Rhodione Supra—if these characteristics suggest the solution for individual needs. Or bring us your particular problems on any perfume. For whatever your product, whatever the fragrance, you'll want to see Du Pont early. You can always depend on Du Pont.

du pont aromatics

DUPONT

Reg. U.S. Pat. Off.

BETTER THINGS FOR BETTER LIVING...*THROUGH CHEMISTRY*

E. I. DU PONT DE NEMOURS & CO. (INC.)

ORGANIC CHEMICALS DEPARTMENT, AROMATICS SECTION, WILMINGTON 98, DELAWARE

Branch Offices: Boston, Charlotte, Chicago, New York, Philadelphia, Providence, San Francisco

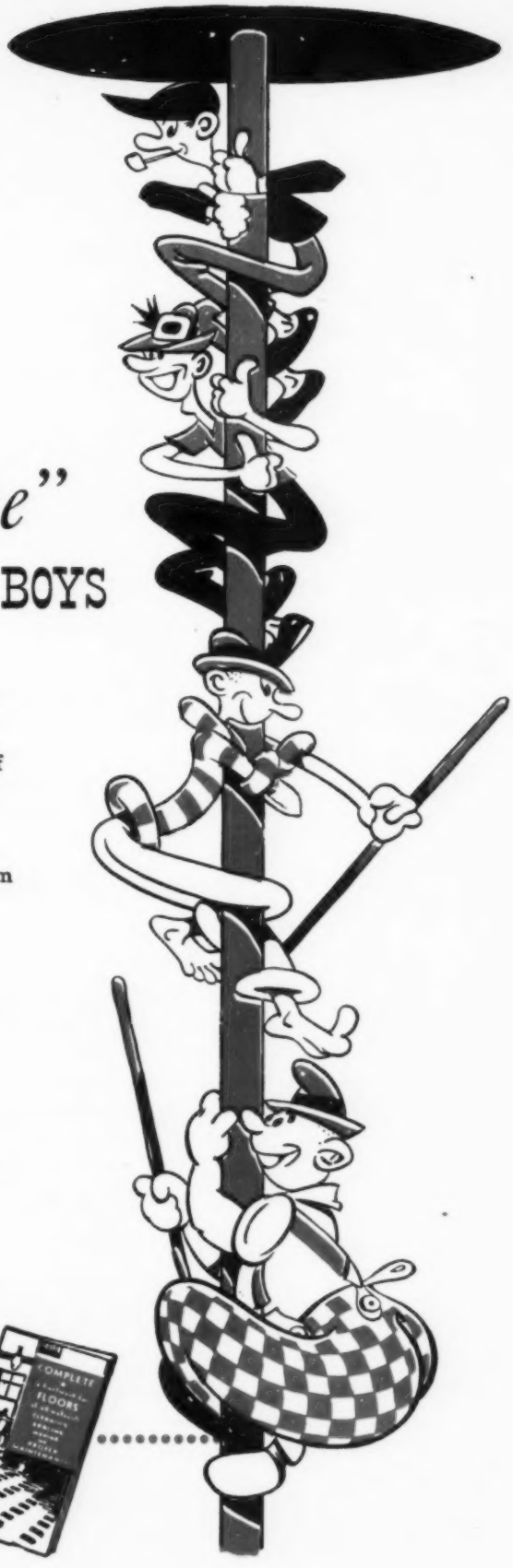
BOYS!

HOLD ON TO YOUR HATS—
HERE WE GO AGAIN!

YOU ARE AGAIN INVITED to enjoy the antics of the Flooradora Boys as they describe their experiences with Davies-Young Soap products. We are announcing a new series of ads featuring these lovable characters. In fact, here they are now—on the opposite page!

"Speed is our middle name"

say THE FLOORADORA BOYS



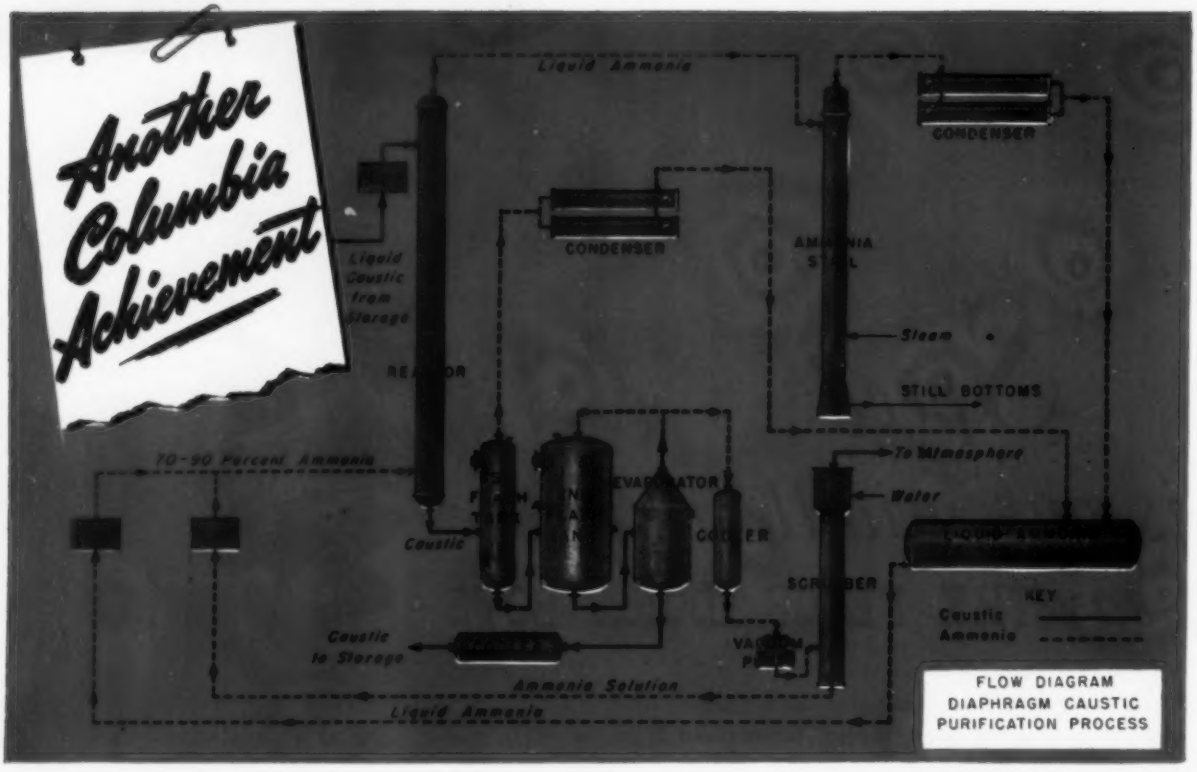
"Consider yourself informed that for a quorum of experts—namely SCRUBBY, MOPPY, RINSEY and WAXEY—even a real *sad* floor comes clean faster'n sliding down a greased pole. And, Mister, you could eat a poached egg off any floor we have lately operated on! But even us fast workers will admit it was no picnic before we got Davies-Young on the job. What we mean—results were strictly negligible. So take it from guys who really know from *something*—get supplies by Davies-Young!"

Buckeye Liquid Scrubbing Soap is for use on all surfaces that require a neutral soap to clean. • **Sani-Scrub** was developed particularly for cleaning rubber, rubber tile, asphalt tile, composition, mastic and cement • **Florex** is a balanced detergent, lower in soap content than Sani-Scrub • **No. 30** is a neutral concentrate 30% to 32% anhydrous • **Beamax** is most effective in developing a protective lustrous film on all types of floor surfaces, after the floors have been prepared by the **right** type of Liquid Scrubbing Soap.

BUCKEYE **FLOREX** **BEAMAX**
SANI-SCRUB **NO. 30**

THE DAVIES-YOUNG SOAP CO.
DAYTON, OHIO

It is imperative that all floor surfaces be properly prepared for wax treatment by use of the above scrubbing soaps where their specific qualifications are required. Send for folder which gives complete information.



Conversion of diaphragm electrolytic to high grade Caustic Soda

Columbia's patented purification process for diaphragm electrolytic Caustic Soda has been an important factor in supplying essential industries.

The manufacture of numerous products—notably rayon and chemicals—requires Caustic Soda of the highest purity. The increasing demands in these fields made imperative the development of facilities to meet these needs.

Columbia's unique method of purification removes all undesirable quantities of sodium chlorate and sodium chloride. The result is Caustic Soda of exceptional purity—ideal for any of the more exacting usages.

This is but one of the more recent accomplishments which distinguish Columbia as a producer of alkalies and related chemical products . . . and which recommend Columbia for your consideration as your supplier.

COLUMBIA CHEMICALS

PITTSBURGH PLATE GLASS COMPANY • COLUMBIA CHEMICAL DIVISION

GRANT BUILDING, PITTSBURGH 19, PENNSYLVANIA

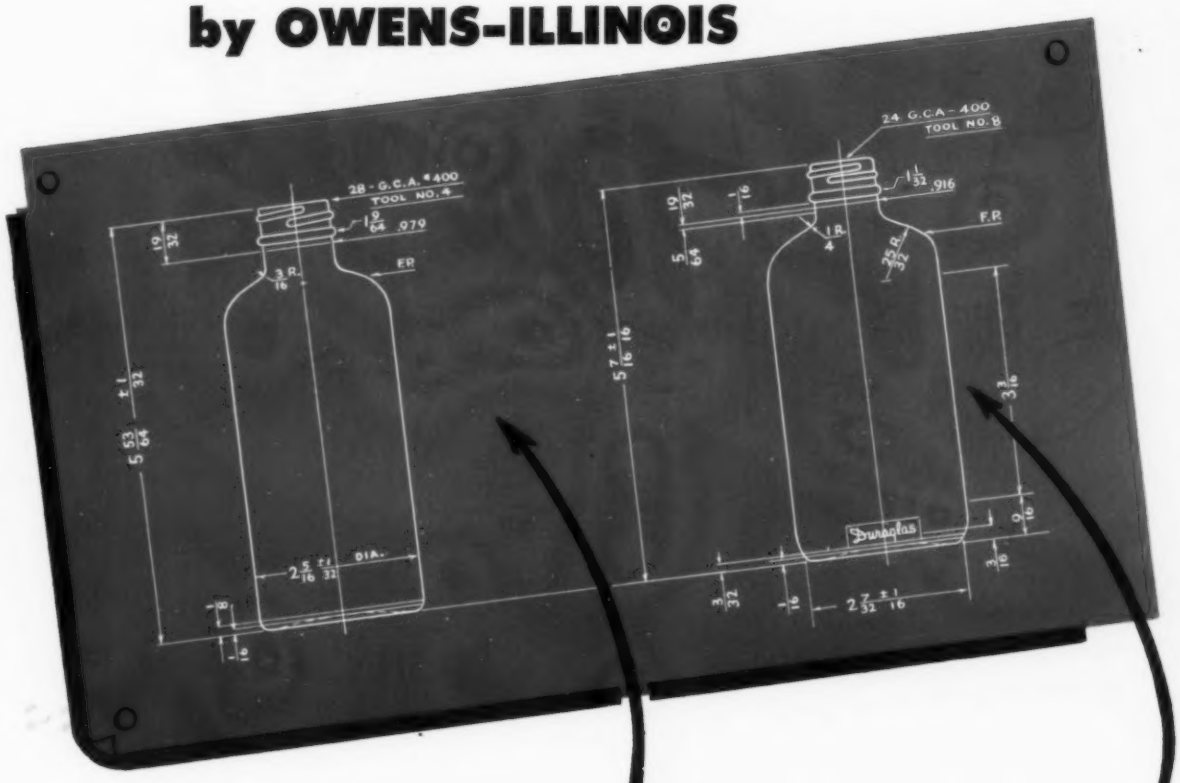
Chicago • Boston • St. Louis • Pittsburgh • New York • Cincinnati • Cleveland • Philadelphia • Minneapolis • Charlotte • Los Angeles

COLUMBIA ESSENTIAL INDUSTRIAL CHEMICALS

Soda Ash • Caustic Soda • Sodium Bicarbonate • Liquid Chlorine • Silene EF (Hydrated Calcium Silicate) • Calcium Chlorine • Soda Briquettes
Modified Sodas • Caustic Ash • Phosflake • Calcene T (Precipitated Calcium Carbonate) • Calcium Hypochlorite

BOSTON ROUNDS

by OWENS-ILLINOIS



WHAT THEY WERE **WHAT THEY ARE**

...what they mean to you

BOTTLE PROGRESS at Owens-Illinois is not measured by decades or generations. It moves forward by years, months and days.

As it moves, its achievements are made available to you.

For example, we illustrate the progress made by re-engineering the famous Boston Rounds.

Re-engineering reduced its height, its weight ... created more graceful shoulders ... increased its strength while decreasing the amount of glass.

The modern Owens-Illinois Duraglas Boston Round is the ideal bottle for liquids. It is built for efficient handling in automatic machinery and high-speed labelers. You can get it in Amber, Flint or Emerald Green.

The eye appeal and display ability of these handsome sturdy bottles make them favorite containers for many products ... give your products positive protection. Consult us for the details of the advantages you gain when you pack your products in Duraglas Boston Rounds.

OWENS-ILLINOIS GLASS COMPANY
TOLEDO 1, OHIO
Branches in All Principal Cities

Duraglas
CONTAINERS
Protectors of Quality

DISHWASHING COMPOUNDS

Target

TRADE MARK REG. U. S. PAT. OFF.

You Can't Get Clean Dishes from a Dirty Machine . . .

Our TARGET Dishwashing compounds represent years of experience in compounding and research. We have developed these various formulae to work satisfactorily under all water conditions and with but one purpose in mind and that is, to produce a material that is ideally suited to the washing of dishes and cutlery in hotels, hospitals, restaurants and similar institutions where the highest degree of perfection is requisite.

KRAFT

(COLOR: WHITE)

A dishwashing compound having incorporated within it the maximum amount of special chemicals, which are necessary to prevent the accumulation of lime and magnesium precipitate on the machine.

CHINALITE

(COLOR: PINK)

A dishwashing compound similar to the one described above, except that it is pink in color and chemically proportioned so that ammonia is liberated when placed in the wash tank.

DISH CLEEN

(COLOR: PINK)

A fine, homogeneous pink powder possessing remarkable emulsifying, cleansing and free-rinsing properties. This compound is also chemically proportioned so that ammonia is liberated when dissolved in water, assuring deodorized, sanitary, brilliant, sparkling dishes and glassware.

ECONOMY

(COLOR: WHITE)

A compound designed to answer the need for a properly proportioned chemical combination that will do a good job at the lowest possible cost.

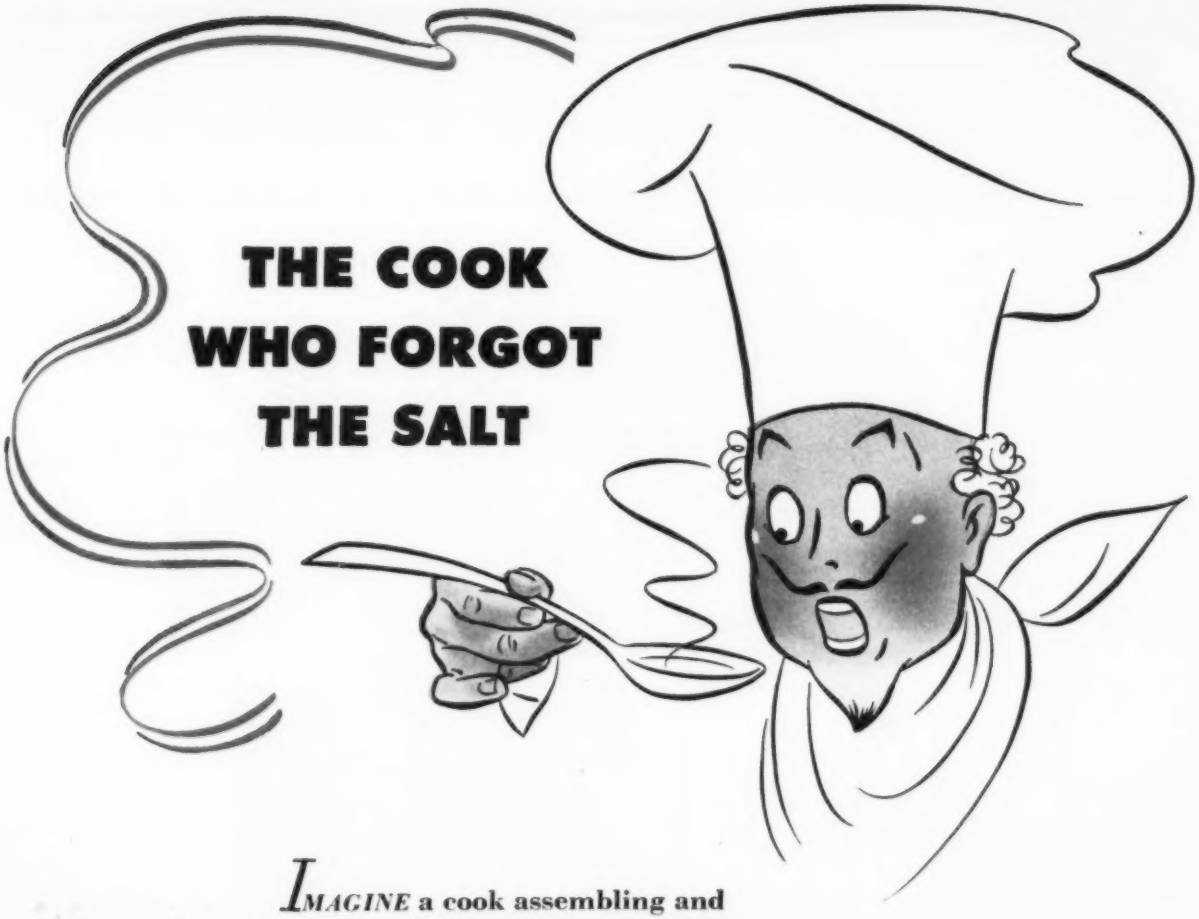
TELL US THE DEGREE OF WATER HARDNESS IN YOUR LOCALITY and we will recommend the proper grade for your use.

Packed in—325 lb. bbls., or 150, 100, 50 and 25 lb. drums.

CHEMICAL MANUFACTURING Co.
AND DISTRIBUTING

EASTON, PENNSYLVANIA

THE COOK WHO FORGOT THE SALT



IMAGINE a cook assembling and blending all the ingredients of a culinary masterpiece, and forgetting the *one* element without which it must taste flat, insipid and unappealing. Or, imagine a manufacturer scrutinizing every feature of a proposed package *except* the selling element.

Perhaps no good cook ever forgets the salt, but many a group of highly intelligent executives, while laboring to procure a successful package, have slighted the *one* element without which NO package can help a product sell.

They have considered material, structure, production and cost . . . capacity to protect, dispense and identify the product . . . what sizes and shapes would be most convenient to handle, to stack and display . . . and have lost sight of the basic fact that, with all those essentials attended to, the *selling power* of a package STILL depends on *how the finished package looks!*

When Ritchie is called upon to design a package, Ritchie engineers and designers integrate *all* the multiple and complex factors involved to create—at low cost—a functionally efficient package that is *also* pleasingly attractive to the eye! That's why a Package by Ritchie *stands out!* That's why a Package by Ritchie SELLS!

THE 5 ESSENTIALS OF A SELLING PACKAGE

1. It must be practical, production-planned, economical to manufacture, easy to fill or pack.
2. It must fully protect and conveniently dispense the product.
3. It must be easy to handle, to stack, display.
4. It must *proclaim* the quality and identity of your product.
5. It must be notably "good looking," memorable, ATTRACTIVE!

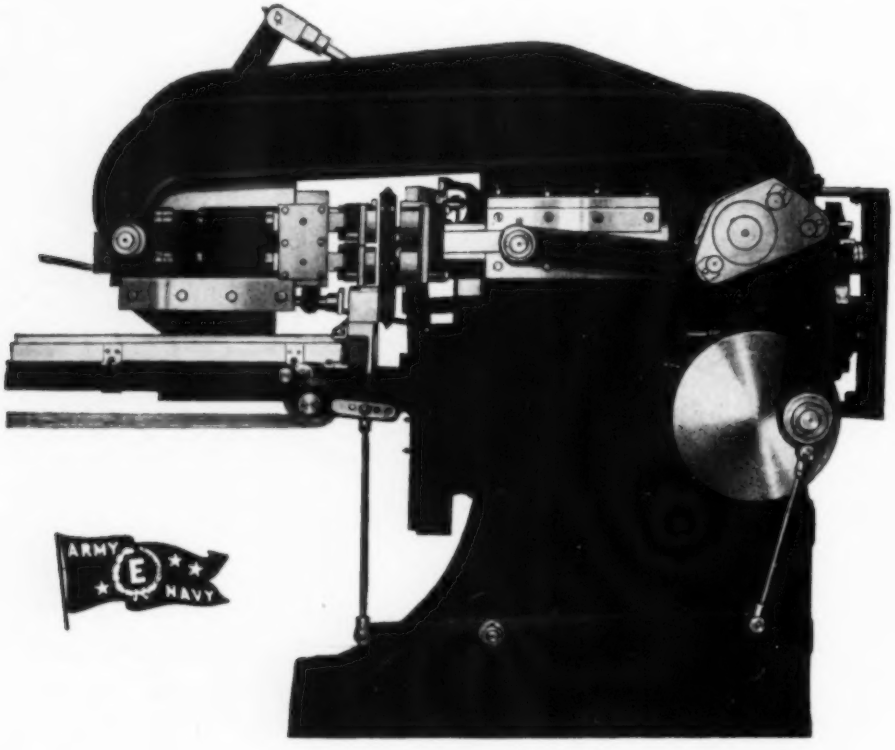
W. C. Ritchie and COMPANY

8882 Baltimore Avenue, Chicago 17

NEW YORK • DETROIT • LOS ANGELES • ST. LOUIS • MINNEAPOLIS

Set-Up Paper Boxes • Fibre Cans • Transparent Packages

JONES TOGGLE PRESSES



TYPE K

JONES SOAP PRESSES insure for your soap that finished appearance which connotes fine quality . . . turn out 90 to 140 cakes per minute . . . run to capacity by one operator . . . toggle operated, hence powerful, perfect pressing without noise or vibration . . . results and economies which you cannot obtain with presses of obsolete vintage . . . laundry soaps as well as fine toilet soap need the sales advantage of good looks . . . JONES modern toggle operated PRESSES are the answer.

The Standardized CONSTANT MOTION CARTONER packages bottles, jars, tins, collapsible tubes and many other articles. It feeds, folds, and inserts direction sheets and corrugated board liners with the loads.

R. A. JONES & COMPANY, INC.

P. O. BOX 485 CINCINNATI, OHIO

AS THE EDITOR SEES IT

THE Soap industry has not yet recovered from the shock of the reduction in fat quotas last month. A fifth amendment to WFO 42b brought the permitted use of fats in soaps for civilian use to the lowest point of the war period. Heavy fat demand as a part in world food requirements as indicated by the Crowley Food Report stands as the cause of this latest reduction in soap fats. Accordingly, WFA appears determined that America is going to get along on a materially lower per capita soap consumption this year.

Before the year is out, we feel that WFA or its successor will realize the seriousness of its error in cutting soap fat quotas again. By making the reduction retroactive to April first, the cut is deeper than appears on the surface. It means that manufacturers of household soaps are now having to operate under seventy per cent and industrial soaps under eighty per cent of 1940-41 because of the retroactive feature of the reduction.

Right now, 100,000,000 pounds of soap fats just about represent the possible difference between an acute soap scarcity later in the year and preventing such a scarcity. Those in the soap industry, who know, say a shortage of this amount can reduce the supply of soap sufficiently to precipitate a "buying panic," to force soap off the retail shelves, and to duplicate the market situation in cigarettes. Even if this amount of fat were shifted bodily to the soap kettle from either our domestic food supply or that destined to be shipped abroad, the effects would be minor compared to the repercussions of a domestic soap shortage.

The statement has been made that irrespective of quotas, many soapers have been unable to obtain needed fats and in some cases the required labor to operate even at the reduced quota capacity. Actually, this is beside the point. It is the overall total soap production of the nation which counts now. If WFA makes the fat available, we feel that most soapers will locate it and find a way to use it. If WFA continues to stand fast at present reduced quota levels, subsequent developments will be strictly a WFA "baby" whether WFA still is or is not around to claim the child a few months hence.

SOMETHING which we feel has been made quite clear to WFA in regard to reduced civilian soap production is the fact that the soap industry is not grinding its own axe in strongly opposing a further reduction. Whether American civilians are able to obtain soap or not a few months hence is in reality "no skin off the chin" of soapers. Their plants will continue to operate at capacity. The fact that close to thirty per cent of current soap output is going for government needs, chiefly shipment abroad, need not be one of their concerns.

As a matter of fact, as long as soapers can sell all the soap which they produce, it might be logical to believe that for purely selfish motives they would welcome a cut in soap for civilians. Conceivably, this would reduce stocks of hoarded soaps which are believed to be generally large in homes throughout the nation, and make the post-war marketing position of every soap manufacturer that much stronger.

But soapers also know that soap stocks in the channels of distribution are low and the rate of reduction in reserve stocks has been considerably accelerated in recent

months. They also know that the market does not have to be completely bare of soap before a breakdown in distribution can occur, bringing periods where entire localities may be unable to obtain any soap whatever. As for an axe to grind, the soap industry does not have one in the present situation.

TO ASK aid in checking illegal practices in pricing and selling soap products, Chester Bowles, OPA Administrator, recently sent a letter to the heads of a number of soap companies. The letter, published elsewhere in this issue, points out specifically tie in sales of cleansers with scarce soap items, marketing new and unauthorized soap products, illegal entry into new sales territories, and retail prices above those listed in MPR 390. Soapers who received this letter are requested to report violations, which Mr. Bowles states are known to exist, inasmuch as the OPA is unable to cope with the situation on a country-wide basis.

Because the soapers to whom Mr. Bowles wrote are indicated as those who have adhered scrupulously to OPA regulations, the letter cannot be interpreted as an intended warning to them. Possibly he hopes that word will be passed along through wholesale and retail channels where wrongdoing may be suspected and thus help to reduce illegal practices. We feel, in reality, that Mr. Bowles is not asking some soapers to report competitors to OPA, but is rather urging leading soapers to keep an eye on their own products in distributing channels.

If it is the intent of Mr. Bowles' request that one soap manufacturer report violations by another manufacturer, we are not too certain that such is well advised. A series of vicious competitive repercussions might readily follow. For a manufacturer to police his own brands is one thing; to set up his sales force as an OPA gestapo to spy on competitors is something else. To eradicate the germ of this same idea, we are fighting a war.

FOR years, soap manufacturers have used tie-in sales for one purpose or another, usually to obtain initial distribution for a new product. But during this war period, tie-ins have been tabooed by OPA for several obvious reasons, the main one being that shoddy goods can thus be forced on an unwilling buyer. The price of the inferior merchandise is, in fact, usually such that the transaction represents the equivalent of a higher price for the standard item than that actually paid.

There are those, however, who do not agree that tie-in sales are wholly wrong. In times of plenty, they maintain, they represent the means of getting new and often superior products to market. In times of scarcity, such as the soap supply of the nation is now approaching, they aid in stretching out the supply of standard items. The recent letter of Chester Bowles to certain soapers mentions the fact that buyers are being forced to take cleansers which are in plentiful supply in order to obtain scarce soap items.

Even though buyers do not like it, nor do those who produce and market the better-known soap brands, is it not in fact a rather practical, albeit unpleasant, method of accomplishing in the long run exactly what OPA wants accomplished, an equitable and wider distribution of scarce items? Maybe Mrs. Murphy does not like the idea of washing dishes with an alkali cleanser, but if she has to do it, she will, with a resultant lessening of her demand for soaps. Maybe our reasoning in the light of OPA experience is all wrong, but as it stands today, we are inclined to believe that tie-in sales might help to a degree to alleviate the soap shortage with which we are faced.

PRICE RELIEF *for* SOAPERS

Trade Comments on Recent Amendment to MPR-391 By OPA Indicate Little Hope That Promised Price Relief Will Be Either Adequate or Readily Obtainable

RESPONDING to the repeated demands of numerous small soapers for relief from the rigid price ceilings that have been maintained on soaps and cleansers in the face of rising costs, the OPA announced last month issuance of a new amendment (No. 5) to MPR-391, designed to afford a measure of relief to manufacturers who can actually establish hardship cases. The relief seems obviously designed only for extreme hardship cases, and particularly to take care of individual soap manufacturers who might otherwise have to suspend production of certain soaps, thus adding further to the soap supply problem.

OPA officials definitely do not seem to contemplate any general industry-wide price increase, but are cultural products; includes garden and it is well to remember that a quality below those of their competitors at the time prices were frozen several years back.

With the very apparent purpose of forestalling any general rise in soap prices, the OPA has surrounded its promise of price relief with a number of high fences which will sharply limit not only the number of firms that may be allowed to advance their prices, but also the extent of the advances that may be authorized. Amount of the adjustment that may be granted individual manufacturers who can establish hardship cases is determined as follows:

1. If applicant's current overall earnings are better than during the base period, ceiling prices will be adjusted so as to equal unit direct cost, average freight out and indirect factory cost per unit currently or for the year 1942, whichever is lower.

2. If applicant's current profits are normal compared with the base period, adjusted prices may also include administrative and selling expenses per unit currently or for the year 1942, whichever are lower.

3. If applicant's earnings are less than during the base period, the ceilings may also include a profit not in excess of the least amount that will result in his earnings being favorable.

4. In all cases, the amount of adjustment is limited to an amount equal to the difference between the applicant's present ceiling and the selling price of the next higher competitive seller able to supply the applicant's customers with the same product or an equivalent substitute.

Since issuance of the new OPA amendment, *Soap and Sanitary Chemicals* has been checking with representative firms among the group of smaller soap makers, to try to determine what the industry thinks of the plans for price relief, whether the promised relief will be adequate, whether the soapers who need price relief will be able to justify their hardship cases, etc. In general the industry attitude seems to be rather negative. OPA rulings and amendments have been so numerous that many in the industry look on the new amendment merely as one more dubious scheme under which they will be asked to search through their cost records for figures which will in many cases not be readily available, fill out voluminous questionnaires for study by OPA representatives, and as a final outcome end up by being turned down on their pleas for price relief. Perhaps these sentiments are unduly pessimistic, but they seem to represent the reaction of small soapers,—where there has been any reaction at all. The following comment from a medium-sized eastern concern is typical:

"This regulation will not give us very much relief, as with us it was not so much a matter of increase of raw material and production costs, as it was that we had a very low selling price on our largest selling brand of packaged soaps. We estimate that our advances in raw material and production costs have been about 30 or 40 cents per case. If it were 40 cents per case, we would still be 90 cents per case under our largest nationally advertised brands. Unfortunately we had just started to manufacture and sell this product in March 1942, and in order to establish a ready market without too much effort, we put a very low selling price on it and naturally were caught in the price squeeze. Therefore the relief offered by this amendment will not materially help us.

"We filed an application for relief about two years ago with the OPA which was turned down. We stated in the application that we had a selling price of one cent per pound

higher in bulk packages as of March 1942, and that this difference plus the cost of additional individual containers, plus the extra labor of packing individual packages would give us an increase of selling price of approximately $1.00 per case, which would then be 30 cents per case under nationally advertised products, but this did not seem to make any difference to them, although the housewife would be benefitted by purchasing this soap which was of as high a quality as the nationally advertised brands.

"We understand that the new amendment is to put back on the market lower priced soaps that have since been withdrawn from the market due to manufacturers not wanting to sell low priced articles when they can put their permitted use of fats and oils to better use.

"This is the position we are in and we do not believe that the amendment will be of any benefit to us, and will not aid in obtaining the quicker price relief as it has not gone far enough. In our opinion, what they should do is to allow the small soapers and manufacturers of private brand soaps an automatic increase in selling price of 20 per cent. This would then put low priced and private brand soaps back on the market and would at the same time benefit the housewife to an extent of approximately two cents per package saving over the price of nationally advertised brands."

A MIDDLE-WESTERN firm advances the suggestion that the OPA might do well to put a small soap maker into its soap pricing department. Such a man, it is pointed, out, would be thoroughly familiar with the problems the small soaper is up against in supplying soaps to the jobbing trade. This firm indicates that they do not believe the new amendment will be of any help to small soap makers caught in a price squeeze situation. They observe that the OPA "is asking too many questions, raising too many objections, (to granting price advances) offering too many excuses." This particular manufacturer estimates that his raw material and labor costs have advanced approximately 7 to 10 per cent over the course of the past two years.

An entirely different note is struck by a west coast firm which comments "OPA regulations governing the selling prices of household soaps and cleaners have done no serious harm to our business. We feel that on the whole, as far as the soap industry is concerned, OPA has done a fairly good job." This firm reports only one specific problem which has arisen because of OPA price control, and this not a serious one. The one item of theirs most affected, they say, "has been the white silicate-filled household bar soap. This item became quite unprofitable and, consequently, we discontinued its manufacture. We were not particularly sorry to do this for the reason that in our opinion this type of soap cannot be made of satisfactory quality without a liberal supply of coconut oil and this is not available. It is one of our principles to turn out no product that is not completely satisfactory to the public and the white silicate soap without coconut oil is not satisfactory."

SOME rather caustic comments on OPA controls, and specifically OPA's record in handling of the soap pricing problems, are included in a letter from a southern firm. Extracts from this letter follow:

"Now that MPR 391 has finally been amended to give price relief to soapers, very few small soapers will be able to receive relief for most of them cannot dig up the required statistics or break down their over-all cost of production minutely. In our case the rising costs against our ceiling prices are indisputable, and our case is one of decided hardship but the OPA will now, probably, stall our needed relief. Their questions are irrelevant to our present-day problems.

"The questionnaire just received from the OPA makes it very plain that whoever formulated those questions had no realization that average small business does not employ statisticians and accountants to keep such records as the questions require. The ramifications of these questions go beyond any bookkeeping system of small private enterprise, and though we spent endless days and weeks digging into our records from 1936 onward, and dug up all the facts and figures required, those facts and figures would have no bearing on the present status of our business.

"We believe any government employee, with an impartial attitude, who knows simple arithmetic, would readily recognize the higher cost of whatever product is manufactured today as compared with two years ago. Yet we could no more substantiate every detail of the questions asked by OPA, than could OPA statisticians come into our factory and manufacture soap, for there exist conditions today not reducible to figures on paper. Too, there are intangible leakages that creep into the cost of production without changing figures on the records other than showing up in less production.

"The two main factors in our higher cost of production are fats and labor. Formerly we carried large reserves of fats, buying at every opportune time. When fat prices became too high we slackened our purchases: when they reached a normalcy we bought heavily, thus, when competition by the giant soapers became difficult we used our cheaper fats—with a rise in prices we used our higher cost fats, and in this manner we could equalize and stabilize our cost of production. Now our reserves of fats are gone, our inventories of fats are light—fat costs have risen from one to two and more cents per pound. Due to the scarcity of fats, cafes, restaurants, and hotels use fats over and over. They now have less fat saponification quality and a greater per cent of debris. During 1944 we emptied no less than 15,000 pounds of residue from our kettles at a loss of $1000.00 to $1200.00.

"Another factor is Labor. Here in the South we use largely unskilled Mexican labor. In 1942 we paid 40 cents an hour—now we pay 50 cents an hour. Time and a half was figured at 42 hours—now at 40 hours. If our 50 cents an hour Mexican truck driver wants a 50 cents an hour factory employee to help him make a delivery, we have to grant that. If the two workers take three hours to make a

delivery of one hour's time, an addition will be made to our overhead.

"Our soaps are not loaded with silicate of soda as are so many soaps. We have always manufactured a good laundry soap with approximately 25 pounds fat content per case. The fat content alone, today, increases the cost of our soaps from 25 cents to 50 cents per case. And when you add the higher cost of fats to the higher costs of labor, even though you entirely disregard other indisputable increases against the ceiling prices of March 1942, our need of a 25 per cent price increase would seem to be apparent. And this request of ours for the increased price should be considered independently of the prices of the big soapers, for as previously stated small soapers have a higher production cost. Too, each soaper has his individual problem.

"When the OPA ceiled our prices in 1942 they made no effort then to learn our financial data covering over-all operations, the quantitative formulae, who our customers were and how many units they bought from us, the profit and loss statements, balance sheets, etc., nor at that time did they inquire into our reserve stocks that made our prevailing prices profitable; nor consider that our good, industrious workers would be subject to draft or lured into government jobs by far higher pay than small industry could afford. However, no matter what facts and figures they would then have required, and even though they then might have been obtainable, those facts and figures would not have any relationship to our operations of today. At no time in our history has there been this present scarcity of materials —the scarcity and independent indifference of labor, and the bureaucratic controls over our initiative and ability to cope with our adverse conditions. No period in our industry parallels this present period.

"Our business must earn its way as it goes. We realize that as soon as the war is over we will need new motors, pumps, trucks, repairs, etc. Our depreciation reserves on our books have been absorbed. Our business must earn or it must close."

Soapers Asked to Report Price Violations to OPA

CHESTER BOWLES, Administrator of OPA, in a letter dated May 21 to the heads of a number of American soap companies asked that violations of OPA pricing regulations coming to their attention be reported to OPA. Stating that OPA does not have a large enough staff to check violations in all parts of the country, Mr. Bowles stated that representatives of these soap companies were usually in a position to hear about such violations as soon as they occur and asked for help in eliminating them.

The Bowles letter mentioned three types of illegal transactions in soap selling, tie-in sales of cleansers with scarce soap items, new and unauthorized soap products brought to market and old products being sold in new areas, and retail prices in excess of those established under MPR 390. The letter in full follows:

"There are increasing numbers of illegal practices appearing throughout the country in connection with the sales of soap products. These practices must be stopped immediately before they are beyond control, and we are therefore asking your advice and cooperation to aid us in this matter.

"The first of these illegal transactions and the one which concerns you most vitally as a soap manufacturer concerns tying agreements. It seems that many soap salesmen are at the present time forcing buyers to take cleansers and other abundant items in order to obtain the package soaps which are short in supply, and that salesmen representing packers are forcing the purchase of cleansers before they will sell meat products. There are many other variations of the same practice all of which, as you know, are illegal. We think that you can and will want to do the job of stopping this practice by making it clear to all salesmen and representatives of your company that the Office of Price Administration is aware of what is happening and that we will take action which will be against both the individuals involved and unfortunately, against the company for which they work.

"Secondly, we have found that since the first of the year, there have been a number of new soap products appearing on the market and old products being sold in new market areas without the authorization of this Office and without our approval of the prices at which they are being sold. Whenever such cases come to our attention, we are taking action against the company and correcting the situation. Few of the soap manufacturers with whom we have dealt for the last few years are involved in this since most of them are thoroughly acquainted with our regulations and have given us excellent cooperation. However, we are asking you to help us eliminate these violations by reporting to us any such cases that come to your attention. We do not have a large enough staff to make a check throughout the country for these violations whereas your representatives are generally in a position to hear of them almost as soon as they occur.

"Last, we have learned that in many areas, and particularly where the supply of soap is shortest, the retail prices of listed brands are above the maximum price established by Maximum Price Regulation 390 and retail prices of some unlisted brands are suspiciously high. We intend to use our local price panels to check the retail prices of soaps in order to stop this practice. However, since some of this is also due to wholesalers' charging higher than maximum prices, we again ask you to make it clear to your buyers that we do not intend to let these violations go unheeded.

"We also hope to obtain the aid of the American Soap and Glycerine Association in carrying out this program against violation. We feel that if they convey to all the member soap manufacturers a general outline of the program presented in this letter, we will obtain better compliance than we could by any other means.

"What we want to do is to work out a program with you whereby we can stamp out these undesirable conditions that are arising. We want your help in carrying out this program and we will appreciate any comments and suggestions that you can give us."

Glycerine Stocks Decline Further

WFA officials continue to evidence concern over declining glycerine stocks. It seems probable that there may shortly be a new order controlling distribution or inventories of glycerine, although a revival of glycerine use restrictions does not seem to be indicated at least for the present.

ABRASIVE CLEANERS

SCOURING POWDERS, PASTES AND BARS

By Milton A. Lesser

FOR centuries sand was the approved means for scouring pots and kettles. Fine sea sand was a recognized article of commerce and many a brass candlestick or andiron owed its brilliance to the combined action of such abrasives and plenty of elbow grease. Then someone got the bright idea that mixing sand with soap would result in a better job requiring less effort. Mason (1) suggests that the first one to incorporate an abrasive with soap may have been motivated by the original practice of our ancestors who mixed sand with soap to remove grease from their hands.

Whatever their origins, scouring powders have a firmly established place in the household as general cleaners for pots, pans, bath tubs and such materials as require the combined action of an abrasive and a detergent. Two other types of abrasive cleaners which bear a close resemblance to scouring powders, both in use and in composition, are the abrasive soap bars or cakes and abrasive soap pastes. Their chief differences lie in their physical form and the amount of moisture present. Based essentially on a combination of abrasive, soap and a material like sodium carbonate, scouring soaps in cake form usually contain a somewhat higher proportion of moisture than scouring powders, while a considerable percentage of water is present in scouring pastes.

Though somewhat eclipsed before the war by steel wool or steel wool-soap combinations, scouring powders have retained their place as the most widely used of household abrasive cleaners. Indeed, such powders, particularly those with feldspar bases, have for years been the only type of abrasive cleaner used by many housewives for scouring pots, pans and other metal utensils as well as for cleaning porcelain, glass and enamel surfaces. (2)

A scouring powder usually consists of a uniform mixture of soap powder and an insoluble abrasive, with or without the addition of such materials as sodium carbonate, trisodium phosphate, sodium metasilicate or the like. The proportions of these several ingredients vary quite considerably, however. The marked difference in proportions was clearly brought out in a report made by Martin (3) just a few years ago. He pointed out that some idea of the range covered by the term "scouring powder" may be gathered from the fact that five published analyses of various products showed the following percentage range variation:

Dry soap	2-10
Moisture	1-20
Sodium carbonate	1-18
Abrasive	50-90

Analyses made in Martin's laboratory on four samples purchased on the open market showed even greater variation in the abrasive content, and two of the samples contained no soap at all. One such powder consisted mainly of calcium carbonate plus a small amount of comparatively coarse sand. From this and from other considerations it is quite evident that certain standards or grades should be established for products of this type as well as for scouring bars and pastes.

Soap is the most expensive ingredient of scouring powders and because price is an important consideration with these highly competitive products, there is often a tendency to skimp on this constituent or to use lower grades of soap. (2) There is also a tendency to use higher proportions of sodium carbonate. This, together with whatever saponaceous material may be present, acts as the cleansing agent in the powders. Aside from the factor of price, the addition of sodium carbonate makes the product more suitable for use in hard water areas.

Sodium carbonate has two disadvantages, according to Martin. First, it attacks the skin of some people and this irritation is aggravated by the presence of abrasives. Secondly, sodium carbonate attacks aluminum utensils. Soda turns bright aluminum surfaces dull and brownish grey. These disadvantages, in his opinion, can be overcome by replacing the soda with trisodium phosphate or sodium metasilicate. Borax has also been extensively used as a partial or total replacement for sodium carbonate.

The abrasives employed in scouring powders include powdered pumice, volcanic ash, quartz, marble, feldspar and silica (silex). In most cases feldspar or silica of various degrees of fineness are favored because they result in a whiter product. (4) Of the two, feldspar has been the most frequently used abrasive because it is both cheap and an efficient abrasive for the rough kitchen work for which products containing it are chiefly intended.

From time to time scouring powders have been criticized because of the overharsh action of their abrasives. (5) In a few instances, the indiscriminate recommendations of manufacturers may be considered responsible.

(2) It must be remembered, however, that ordinary scouring powders have been designed primarily to clean and polish cooking utensils in the home. Noting their efficiency for such hard-to-clean materials, housewives have adopted scouring powders as all-around heavy duty cleansers for kitchen sinks, bath tubs, woodwork and even floors. The fact that a variety of special purpose scouring and related products for specific uses are available should emphasize the fact that most manufacturers are aware of the limitations of ordinary scouring powders. The type of abrasive to be incorporated in a powder will depend largely upon the type of surface to be cleaned. Those who contemplate the manufacture of such products might do well to check the several articles on abrasives already published in *Soap and Sanitary Chemicals*. (6, 7)

THE METHOD for manufacturing the better grades of scouring powders is essentially the same as for making soap powders, except that a heavy type mixer must be used because the product is quite dense. (4) While this method is appropriate for higher class powders, it is unlikely that it need be applied to products containing small proportions of soap. In such cases it would appear simpler to mix the dry soap powder, adjunct detergent and abrasive in a suitable powder mixer.

Formulas for making a variety of scouring powders have been published frequently in technical books and journals. Typical of such compositions is the following product described (1) as useful for cleaning kitchen utensils, sinks and other objects which are not injured by strong abrasives and alkalies. Made by simply mixing the dry ingredients, it consists of:

Volcanic ash	90 parts
Sodium carbonate	6 parts
Powdered soap	4 parts

Indicative of the old-fashioned sand soaps, which enjoyed popularity for cleaning kitchen ware, is a formula given in one of the British reference texts: (8)

Powdered soap	5 parts
Calcined soda	10 parts
Pumice powder	20 parts
Fine sand	65 parts

This may be contrasted with a more modern, well rounded cleaning powder described by Belanger: (9)

Powdered borax	5 parts
Powdered soap	30 parts
Soda ash	5 parts
Powdered volcanic ash	35 parts

The ingredients are mixed intimately by sieving to form a rather versatile general purpose cleaner and polish with many uses in the kitchen, bathroom and other parts of the house.

Scouring powders consisting solely of a uniform mixture soap powder and abrasive make efficient cleansing agents. (10) A typical preparation of this type has been described (11) as consisting of 7 per cent soap powder and 93 per cent powdered silica. Obviously the proportions of these two ingredients, as well as the type of abrasive used, may be varied to meet specific requirements.

In other instances the sodium carbonate may be reduced partially or supplemented by the use of other detergent alkalies. In the two formulas following, (11) soda ash is used in conjunction with trisodium phosphate to make effective household scouring powders:

	A	*B*
Soap powder	2	4
Soda ash	3	13
Trisodium phosphate	40	8
Silica (100-125 mesh)	55	75

The tendency in some quarters to reduce the soap content of scouring powders reaches its climax in products containing no saponaceous material at all. However, it is possible to make quite effective scouring products with a suitable blend of alkaline detergents, as in the following scrubbing powder given in Bennett's text:

Abrasive powder	63 parts
Soda ash	15 parts
Trisodium phosphate	10 parts
Sodium metaphosphate	5 parts

Realizing the shortcomings of so-called "general purpose" scouring powders and with an appreciation of the need for more specialized products, many formulas have been developed to meet more specific requirements. In many cases, the type of abrasive incorporated in the powder will be the determining factor in its range of usefulness, but often the type and kind of soap or alkali, or both become important considerations. As an example of the role of the abrasive, one might cite the part played by chalk in the formulation of special purpose scouring powders. Although chalk has been suggested as an ingredient of general-use powders for kitchen and household, it does not possess sufficient hardness to be effective on greasy or heavily incrusted pots and pans unless strongly fortified with soap and alkalies, but it is sufficiently effective to act as a safe mechanical cleanser for bathtubs and similar vitreous surfaces. Hence, one finds it recommended (11) as a major ingredient of special bathtub cleaners like those given in the two formulas following:

	A	*B*
Trisodium phosphate	25	10
Powdered soap	25	20
Finely powdered chalk	50	70

Careful formulation for particular uses is often apparent in industrial specifications for cleaning and scouring powders. One large eastern railroad offers a case in point. Thus, for cleaning painted and varnished surfaces, its requirements call for a powder consisting of a mixture containing 30 per cent of neutral soap; the remainder being a siliceous abrasive material consisting of pulverized pumice, tripoli, quartz or feldspar. The abrasive used must be of such fineness and character that it will not scratch varnish. This railroad also uses a scouring powder for marble, tile and similar materials generally where painted surfaces are not involved. This is a mixture of:

Soap	5 parts
Soda ash	2-8 parts
Siliceous abrasive	90 parts

In both instances the abrasive must pass 90 per cent through a 200-mesh sieve.

The height of specialization is apparent in the following aluminum cleaning powder. Said (11) to be patented, it consists of:

Powdered pumice	25 parts
Powdered calcined silica	25 parts
Sodium sesquicarbonate	25 parts
Trisodium phosphate	10 parts
Powdered soap	10 parts
Ammonium chloride	5 parts

The older patent literature frequently described special scouring powders or products made from special materials. One such scouring composition, described some years age, (12) is a rather simple mixture of soap powder combined with one to three times its quantity of natural magnesite ground to approximately 50 mesh per linear inch.

ALTHOUGH abrasive pastes for kitchen and household use have been promoted from time to time in the past, it is only within the last few years that they have aroused any real interest—this despite the fact that very similar products — namely, mechanics' hand pastes, have long enjoyed wide sales. Perhaps, as one writer (2) has suggested, the steel wool shortage may have been an important factor in the growing popularity of scouring pastes. However, rather than remaining temporary war time expedients, such products display sufficiently advantageous characteristics as to warrant additional effort to put them over with housewives. They are convenient, easy to use, work efficiently and are fairly easy to make.

Intended primarily for rough and tough kitchenware cleansing, the study (2) of a few products on the market showed their composition to be within the range of the following figures:

Soap chips (dry)	12-20 per cent
Coarse pumice	30-50 per cent
Sodium silicate	2- 5 per cent
Glycerine	1- 5 per cent
Water	25-40 per cent

Thus, the average composition of one of these scouring pastes is about 18 per cent soap chips, preferably the yellow type, which would approximate 15 per cent anhydrous soap; 40 per cent pumice of a coarse but uniform grade; 3 per cent commercial, 40° sodium silicate; about 35 per cent of water; and 2 per cent glycerine. Such pastes are designed to be used by rubbing a wet cloth over the surface of the cleanser and then scouring the pot or pan as one would use a metal paste polish.

With suitable modification, especially with regard to the type of abrasive, it is quite possible that scouring pastes might be made suitable for a variety of other household cleansing purposes.

Several methods for making scouring pastes have been published in the technical reference texts and these offer some information on their preparation, in addition to that given above. In one method, (11) a strong, hot soap solution, sufficiently concentrated so that it sets to a jelly upon cooling, is mixed with 10 to 15 per cent of a powder consisting of equal parts of trisodium phosphate and tetra-

sodium pyrophosphate. Finely ground pumice (100-mesh or finer) is added and mixed in thoroughly to yield an effective scouring abrasive paste.

The same source also provides another indicative formula for a cleansing paste.

Powdered hard soap	5 parts
Sodium carbonate	10 parts
Fine pumice powder	60 parts
Sea sand	25 parts
Glycerine (5-10% aqueous solution), sufficient to make a paste	

While not intended for household use, the scouring paste for machines, given below, serves to illustrate some of the possible variations with this type of product:

Hard soap	7 parts
Water	60 parts
Pine Oil	5 parts
Soda ash	10 parts
Finest sand.....enough to give a paste	

Perhaps the most interesting indication of growing interest in scouring pastes is the number of such products that have been patented during recent years. For example, according to one patent, (13) a cleanser for household utensils and appliances is made essentially of:

Diatomaceous earth	18 lb.
Magnesium carbonate	3 lb.
Soft soap	2 lb.
Sodium carbonate	1 lb.
Crude sugar	1½ lb.
Water	30⅝ lb.

Rather indicative of the refinements and use-extensions possible with such products is a cleansing "cream" described in a British patent. (14) Said to be useful for cleaning such materials as porcelain, enamel, aluminum, silver and the like, the cream is obtained by mixing:

Soft soap	5 lb.
Whiting	24 lb.
Water	12 lb.

If desired, one pound of washing soda may be added to the above mixture. It will be noted that a very fine type of abrasive material is used in this composition.

THE third type of scouring cleansers, those available as bars or cakes, once enjoyed wide popularity, but have lost considerable ground during the last decade or so. While not so important as household items as formerly, cake scouring compounds are still sufficiently interesting from the sales aspect to warrant some brief consideration. Scouring cakes consist largely of abrasive materials, such as silex or sand, powdered pumice, volcanic ash, feldspar or other suitable material, with a binder of soap, and frequently contain considerable sodium carbonate.

Since a higher lathering quality is generally required of scouring cake soap than of scouring powders, coconut oil is often used in whole or in part as the fat base. The fat is saponified with caustic soda in a crutcher, and the sodium carbonate solution, a small amount of sodium chloride solution, and the abrasive are added. After thorough mixing, the mixture is framed and cut, or else it is run directly into molds and allowed to harden. (10) In their discussion of scouring soaps, Thomssen and Kemp (4) stress that extreme care must be exercised to avoid adding too much water or the mass will crack when it cools. In cases where the product has been framed it is necessary to use a special heavy duty cutting machine and cutting table, due to the toughness of the finished product. The dies used for pressing scouring tablets must be made of hardened steel, because of the abrasive action of this type of soap.

Related to scouring soap cakes are the "holy stone" type of scouring bricks said (2) to still find some use on board ship. The idea behind such products has been adapted for making cleaning and polishing blocks suitable for use on cooking pans and similar utensils. According to the patent specifications (15) such blocks are formed of coarse aggregate pumice, fine natural pumice, magnesite and oxy-chloride cement or oxy-phosphate cement.

Although the production of scouring cleansers appears to have become stabilized, it should be obvious that many improved modifications are still possible. While it is quite true that this is a highly competitive field in which price is a major consideration, it is well to remember that a quality product with superior properties will always command a good market.

Bibliography

1. Mason, D. F.: Chem. Ind., 45:50, 1939.
2. Anon.: Soap & Sanit. Chem., 19:30, April, 1943.
3. Martin, J. H.: Manuf. Chem., Nob. 1938, p. 339.
4. Thomssen, E. G. & Kemp, C. R.: "Modern Soap Making," New York, MacNair-Dorland, 1937, pp. 261-7.
5. Anon.: Consumers' Research Bull., 2:9, Feb. 1936.
6. Roley, R. L.: Soap & Sanit. Chem., 15:24, Dec. 1939.
7. Schester, M. P.: Soap & Sanit. Chem., 14:21, April 1938.
8. Forrester, G. P.: "Pharmaceutical Formulas," Vol. II, Ed. 10, London, Chemist & Druggist, 1934, p. 562.
9. Belanger, E.: "Drug & Specialty Formulas," New York, Chem. Publ. Co., 1941, p. 6.
10. Smither, F. W.: "Washing, Cleaning and Polishing Materials," Nat. Bur. Standards Circular C 424, Washington, U. S. Dept. Comm., 1939, pp. 20-1.
11. Bennett, H.: "Chemical Formulary," Vols. I-VI, New York, Chem. Publ. Co.
12. Huyzer, W. J. A.: Brit. Pat. 337,-855, 1929.
13. Howlett, L. J.: Australian Pat. 111,-451, Sept. 2, 1940.
14. Brookes, G. I.: Brit. Pat. 483,928, April 28, 1938.
15. Kennedy, J. J.: U. S. Pat. 2,108,-405, Feb. 15, 1938.

Tall Oil Studies

Tall oil from green and seasoned slash pinewood was studied. The extractives were converted to sulfate soap; details are given of the methods used for concentration of the raw black liquor, isolation of the tall oil and the separation of the component classes of fatty and resin acids. Tall oils from the green and seasoned woods had the following characteristics respectively: Saponification number 180.5, 173.3; acid number 171.3, 154.9; Hanus iodine number 118.1, 90.0, n^{20}_{D} 1.5001, 1.5200, and d^{20} 0.9687, 0.9856. The fatty acids in green wood undergo a decrease in unsaturation on seasoning for four months at 70° F. What appear to be hydroxy fatty acids are formed from the unsaturated acids through oxidation by air during the seasoning period. The soaps from seasoned-wood tall oil show considerably lower foam stability than those from green wood. K. W. Max. *Southern Pulp Paper J.* 7, No. 8, 9-13, 28, 30-2; No. 9, 22-4, 26, 28 (1945).

Photo by John Loughlin

The Way It Looks *in* Washington

By
C. H. JENKINS

IN A surprise move last month the War Food Administration prescribed a further cut in oil and fat quotas for soap makers, dropping the rate on household bar and package soaps from 80 per cent to a new figure of 74 per cent, and reducing the quota on industrial soaps from 90 per cent to 84 per cent. These rather severe quota reductions, which came on top of similar reductions a few months ago, were included in Amendment 5 to WFO 42b issued May 3rd. The cuts were made retroactive to April 1, so that the effect will be felt even more severely over the closing weeks of the second quarter,—with soap makers forced to operate even below the 74 and 84 per cent levels to equalize out after their operation through April at the former higher levels.

The reason for the new quota cut may readily be found in the plans which WFA has made for using American fats and oils to meet world food requirements over the coming year. A recent report on the food outlook by Leo T. Crowley of the Interagency Committee on Foreign Shipments indicates that it is planned to ship 800,000 long tons of fats and oils to Europe this year. Most of this must come from the United States which this year will produce a smaller oil and fat crop by 700,000 tons than in 1944. The obvious answer is reduced consumption at home, according to Mr. Crowley, and present plans anticipate a reduction in the civilian rate of oil and fat consumption in the United States from the pre-war figure of 42.2 lbs. to an annual rate this year of 36 lbs. per capita. The cut in soap quotas flows directly from this planning and these discouraging figures.

In the face of this further forced cut in soap production rates, the prediction is being rather freely made in the industry that within a few months at the most a severe depletion of soap stocks and a complete breakdown in soap distribution can be anticipated. The Association of American Soap and Glycerine Producers is reported to have filed a rather strong statement with Washington officials, pointing out the great danger in allowing soap production and stocks to fall to such low levels, and calling for immediate action to head off a soap famine. It is understood that a number of suggestions have been advanced to meet the threatened crisis, including a reduction in exports of soap, expediting imports of coconut oil, permission to use edible fats in the soap kettle, and an increase in the red point bonus for salvaged household fat.

This problem, and others affecting the soap industry, may shortly be the concern of the Department of Agriculture, as Washington reports indicate that the War Food Administration is shortly to be merged with the Agriculture Department and the overlap of authority, jurisdiction and personnel eliminated.

Coconut Oil Outlook Dismal

First steps to expedite copra shipments from the Philippines have been taken with the signing of a contract for procuement of copa and copra products between the United States Commercial Co. and the Copra Export Management Co. The latter corporation was formed by representatives of five concerns which were engaged in the copra export trade in the Philippines prior to the war.

The company was formed to provide an agency experienced in Philippine copra procurement to operate only during the period when normal trade with the Philippines cannot be conducted. The Copra Export Managment Co. will begin purchasing as military conditions permit. In order to expedite operations a resident manager of the company, now in the Philippines has been appointed. A copra buying mission will leave soon for the islands.

The five companies now participating in the agreement are the Philippine Refining Co., Spencer Kellogg & Sons, Inc., the Procter & Gamble Trading Co., the El Dorado Oil Works and Atkins Kroll & Co. Additional concerns may participate.

The general opinion among American importers of copra and coconut oil is that a period of from five to six months will be required to reestablish the copra producing facilities in the Philippines. No large quantities of copra can be expected to arrive for crushing in American west coast mills before the end of 1945, they believe, although small amounts may arrive any time from now on. Philippine plants are reported to have suffered severe damage during the Jap occupation, and little or no crushing can be expected there until the plants can be rebuilt. When the plants can be rebuilt, even the question of whether or not they will be rebuilt, must wait until our future policy regarding the Philippines can be clarified and trade agreements concluded between the two countries.

Distilled Red Oil Allocated

Distilled red oil was returned to allocation by the WFA beginning June 1, 1945. The former allocation order had been suspended April 1, 1944. Under a new amendment to WFO 53, distilled red oil will now be distributed and used only upon specific authorization, although an exemption is provided for users of quantities of 450 lbs. or less in any one month. Saponified red oil has been placed in a preferential delivery status to make it available for essential uses before it can be used in producing liquid, industrial laundry or household laundry soap. Inventories of saponified red oil will be subject to the limitation provisions of WFO 87.

Allocate Sodium Metasilicate

Because of increased military requirements, according to the WPB, it has been necessary to put sodium metasilicate back on an allocation basis effective June 1. The former allocation order was revoked in September, 1944, and metasilicate has been free from control since that time. It will now be controlled under Schedule 106 of Order M-300, the general chemicals allocation order. Allocation will be made at bi-monthly intervals, beginning with the initial allocation on June 1. A small order exemption of 800 lbs. (anhydrous basis) is provided. Users seeking more than 16,000 lbs. (anhydrous) must file reports on Form WPB 3442, and users seeking delivery of more than 1,600 lbs. (anhydrous) in any allocation period from all suppliers must furnish each with a certified statement of proposed use, as provided in Appendix D of Order M-300.

Remove Dispenser Restrictions

Former prohibitions against use of iron and steel in the manufacture of soap dispensers are no longer in effect, as a result of the revocation of Iron and Steel Conservation Order M-126.

Relax Soap Wrap Restrictions

Former restrictions on the use of glassine, greaseproof and vegetable parchment wraps on soaps have been removed. Order M-286 which governed use of these specialty papers has been revoked.

Release DDT for Potato Beetle

A quantity of DDT has just been released for control of the potato flea beetle in the State of Oregon. Due to the shortage of rotenone, which is the normal control material, and to special problems faced in the control of this pest in Oregon, it was decided to release a relatively small quantity of DDT. It will be used in the form of a 3 per cent dust.

This is the first commercial civilian use of DDT. A WFA publicity story announcing the release indicated that there will be no deleterious residue problem involved in treating potato vines with this low a concentration of DDT. No great danger of harming other vegetation, or bird, animal or insect life, is anticipated.

Revise Insecticide Allocation

A new method for allocation of rotenone and pyrethrum was to have been issued around June 5 by the WPB. It provides that these materials will be subject to quarterly rather than monthly control. Under the new schedule it will not be necessary for consumers to apply on WPB-2945; instead as Appendix B materials under M-300. In addition, (a) purchasers must furnish statements of proposed use and use the materials for that purpose only; (b) suppliers' applications are to be made on the tenth day before the first month of the calendar quarter in which deliveries are expected and processors must file WPB-2945 listing all persons who wish to purchase rotenone or pyrethrum during the calendar quarter, beginning July 1, 1945 (c) suppliers must, within a week after receipt of WPB authorization, notify the customer of the WPB's action (d) persons furnishing suppliers with certified purchase orders for delivery in requested allocation period shall be listed so WPB knows of all requests for these materials.

Insecticide Committees to Meet

A series of Industrial Advisory Group Committee meetings will be held June 13 through June 15 in Washington. On June 13, the Arsenic Group will meet and also the DDT Producers Industry Advisory Committee. A meeting of the WFA Economic Poisons Industrial Advisory Group will be held June 14. On June 15, the Pyrethrum Processers and the Rotenone Processers Industrial Advisory Committees will meet.

Thallium Sulfate Allocated

Thallium sulfate was put on allocation May 29. The reason is said to be fear of spread of rodent borne diseases which have been increasingly prevalent both in Europe and the Pacific. Schedule 107 of M-300 covers thallium sulfate allocation.

Sprayer Committee Meets

Members of the Household Insecticide Spray Gun Industry Advisory Committee met in Washington, May 24. Plans for stimulating sprayer production were discussed. The government advisor in charge of the meeting was S. Gordon Starr, of WPB Consumer Durable Goods Division.

Current demand for less-than-quart capacity hand sprayers was estimated by an Office of Civilian Requirements representative at approximately 12,000,000(plus a backlog of about 8,000,000 orders, making a total present demand for some 20,000,000

Turn to Page 165)

Propose Revision Of
U. S. HAND SOAP SPECIFICATION

A PROPOSED revision of Federal Specification P-D-221 (for Detergent, Hand, Paste and Powder for Mechanics' Use) has recently been drawn up by the Technical Committee on Detergents, appointed by the Federal Specifications Executive Committee, and is being submitted to manufacturers of the product for their comments or criticism. It is requested that any comments or criticisms be sent as promptly as possible to F. W. Smither, chairman, Technical Committee on Detergents, care of the National Bureau of Standards, Washington, D. C. The new specification provides for three types of hand detergent (hand grit paste soap, hand scouring powder with mineral abrasive and hand scouring powder with vegetable abrasive) as compared with but one type (a powder) in the present specification.

A revision has also been prepared of P-S-576 (Soap, Grit, Hand). This revision is likewise still tentative and comments and criticism are requested so that such revisions may be made in the preliminary draft as may be necessary before its submission to the Federal Specifications Executive Committee. The changes in this specification are comparatively few in number. The maximum permissible content of matter volatile at 105° C. is dropped to 25 per cent in the new draft as compared with the former figure of 30 per cent. A maximum of only 35 per cent of insoluble siliceous material is fixed in comparison with the 40 per cent maximum in the old draft of the specification. A new requirement has been added setting a minimum content of anhydrous soap at 35 per cent. Reference to maximum glycerol content has been deleted. A change in method of computation is covered in the new draft, with calculations to be based on the new 25 per cent maximum allowable moisture and volatile matter content.

As the changes in P-D-221 are more extensive, we reproduce below the complete text of the new tentative specification:

PROPOSED REVISION
OF
FEDERAL SPECIFICATION P-D-221
FOR
DETERGENT, HAND, PASTE AND POWDER (FOR) MECHANICS' USE

A. APPLICABLE SPECIFICATIONS

A-1. The following Federal Specifications of the issue in effect on date of invitation for bids shall, in so far as applicable, form a part of this specification:

P-S-536—Soap and Soap-Products; General Specifications (Methods for Sampling and Testing).
RR-S-366—Sieves; Standard, Testing.
FF-D-396—Dispensers; Soap.

B. TYPES

B-1. Detergent for mechanics' use shall be of the following types, as specified (see par. I-8):

Type I—Hand grit paste soap.
Type II—Hand scouring powder with mineral abrasive.
Type III—Hand scouring powder with vegetable abrasive.

C. MATERIAL

C-1. *Type I*—Detergent for mechanics' use shall be a uniform mixture in paste form, and shall be satisfactory for removing oil, grease, paint, printing inks, and other occupational soil from the hands of automobile mechanics, machinists, and other operatives without harmful effect on the skin. It shall lather freely when used with soft water at room temperature (see pars. F-4 and I-4).

C-2. *Type II*—Detergent for mechanics' use shall be a uniform mixture in powder form, with a mineral abrasive, and shall be satisfactory for removing oil, grease, paint, printing inks, and other occupational soil from the hands of automobile mechanics, machinists, and other operatives without harmful effect on the skin. It shall lather freely when used with soft water at room temperature (see pars. F-4 and I-4).

C-3. *Type III*—Detergent for mechanics' use shall be a uniform mixture in powder form, with vegetable abrasive only, and shall be satisfactory for removing oil, grease, paint, printing inks, and other occupational soil from the hands of automobile mechanics, machinists, and other operatives without harmful effect on the skin. It shall lather freely when used with soft water at room temperature. It shall be free from insect infestation (see pars. F-4 and I-4).

D. GENERAL REQUIREMENTS

D-1. See section E.

E. DETAIL REQUIREMENTS

E-1. *Type I—Hand grit paste soap.*

E-1a. The material shall be a uniform paste.

E-1b. *Odor*—The odor shall not be objectionable. If desired, it shall conform to the odor of a sample mutually agreed upon by buyer and seller. The mutually agreed upon sample shall be kept in an airtight, closed container for comparison with samples from deliveries. (See pars. F-4, I-2 and I-3).

E-1c. *Matter volatile at* 105 ± 2° *C*—Volatile matter shall not exceed 55.0 per cent.

E-1d. *Alkaline salts*—Alkaline salts, calculated as sodium carbonate (Na_2CO_3), shall be not less than 3.0 per cent nor more than 8.0 per cent.

E-1e. *Free alkali*—Free alkali, calculated as sodium hydroxide (NaOH), shall not be present.

E-1f. *Free acid*—Free acid, calculated as oleic acid, shall not exceed 1.5 per cent.

E-1g. *Anhydrous soap*—Anhydrous soap, calculated as soda soap, shall be not less than 8.0 per cent.

E-1h. *Insoluble siliceous material*—Insoluble siliceous matter shall be not less than 25.0 per cent nor more than 40.0 per cent and shall conform to the following fineness requirements:

Retained on	*Minimum Per Cent*	*Maximum Per Cent*
No. 40 sieve.....	....	0
No. 60 sieve.....	....	20
No. 100 sieve.....	....	55
No. 200 sieve.....	60	....

E-1i. *Hydrogen ion content*—The pH of a 1 per cent suspension by weight of the detergent in distilled water shall not exceed 10.2 when measured as indicated in paragraph F-3.

E-1j. *Consistency*—The material shall retain the consistency of a firm paste after keeping in a closed container for 6 hours at 45° to 47° C (113° to 116° F).

E-1k. *Keeping qualities*—The material shall not deteriorate when kept in an airtight container.

E-1l. *Computation*—The percentage of matter volatile at 105 ± 2° C will be computed on the basis of the grit paste soap as received, but all other constituents will be calculated to the basis of material containing 50.0 per cent of matter volatile at 105° ± 2° C.

E-2. *Type II—Hand scouring powder with mineral abrasive.*

E-2a. The material shall be a uniform, free-flowing non-caking powder when used in Type III or IV dispenser, conforming to Federal Specification FF-D-396.

E-2b. *Odor*—The odor shall not be objectionable. If desired, it shall conform to the odor of a sample mutually agreed upon by buyer and seller. The mutually agreed upon sample shall be kept in an airtight, closed container, for comparison with samples from deliveries. (See pars. F-4, I-2 and I-3).

E-2c. *Matter volatile at* 105° ± 2° *C*—Volatile matter shall not exceed 10.0 per cent.

E-2d. *Alkaline salts*—Alkaline salts, calculated as sodium carbonate (Na_2CO_3), shall be not less than 3.0 per cent nor more than 8.0 per cent.

E-2e. *Free alkali*—Free alkali, calculated as sodium hydroxide (NaOH), shall not be present.

E-2f. *Free acid*—Free acid, calculated as oleic acid, shall not exceed 1.5 per cent.

E-2g. *Anhydrous soap*—Anhydrous soap, calculated as soda soap, shall be not less than 30.0 per cent.

E-2h. *Insoluble siliceous material*—Insoluble siliceous matter shall be not less than 40.0 per cent nor more than 50.0 per cent and shall conform to the following fineness requirements:

Retained on	*Maximum Per Cent*
No. 60 sieve	5
No. 100 sieve	30
No. 200 sieve	60

E-2i. *Hydrogen ion content*—The pH of a 1 per cent suspension by weight of the detergent in distilled water shall not exceed 10.2 when measured as indicated in paragraph F-3.

E-2j. *Rosin or sugar*—These substances shall not be present.

E-2k. *Computation*—The percentage of matter volatile at 105° ± 2° C will be computed on the basis of the material as received. All other constituents will be calculated to the basis of material containing 10.0 per cent of volatile matter at 105° ± 2° C.

E-3. *Type III—Hand scouring powder with vegetable abrasive.*

E-3a. The material shall be a uniform, free-flowing, non-caking powder when used in a Type III or IV dispenser conforming to Federal Specification FFF-D-396.

E-3b. *Odor*—The odor shall not be objectionable. If desired, it shall conform to the odor of a sample mutually agreed upon by buyer and seller. The mutually agreed upon sample shall be kept in an airtight, closed container for comparison with samples from deliveries. (See pars. F-4, I-2 and I-3).

E-3c. The detergent shall not contain any abrasive of mineral origin.

E-3d. *Matter volatile at* 105° ± 2° *C*—Volatile matter shall not exceed 10.0 per cent.

E-3e. *Total matter insoluble in alcohol*—Shall not exceed 45.0 per cent.

E-3f. *Alkaline salts*—Alkaline salts, calculated as sodium carbonate (Na_2CO_3), shall be not less than 3.0 per cent nor more than 8.0 per cent.

E-3g. *Free alkali*—Free alkali, calculated as sodium hydroxide (NaOH), shall not be present.

E-3h. *Free acid*—Free acid, calculated as oleic acid, shall not exceed 1.5 per cent.

E-3i. *Anhydrous soap*—Anhydrous soap, calculated as soda soap, shall be not less than 35.0 per cent.

E-3j. *Hydrogen ion content*—The pH of a 1 per cent suspension by weight of the detergent in distilled water shall not exceed 10.2 when measured as indicated in paragraph F-3.

E-3k. *Fineness*—The material shall meet the following requirements:

Retained on	*Minimum Per Cent*	*Maximum Per Cent*
No. 12 sieve	....	0
No. 60 sieve	60	80
No. 100 sieve	80	100

E-3l. *Rosin or sugar*—These substances shall not be present.

E-3m. *Stability*—The material shall pass the test described in paragraph F-2.

E-3n. *Computation*—The percentage of matter volatile at 105° ± 2° C will be computed on the basis of the material as received. All other constituents will be calculated to the basis of material containing 10.0 per cent of volatile matter at 105° ± 2° C.

F. METHODS OF SAMPLING, INSPECTION, AND TESTS

F-1. *Consistency test, Type I*—Keep the sample in a closed container (preferably an original package) at a temperature of 45° to 47° C (113° to 116° F) for 6 hours. Note by visual inspection and stirring the consistency of the material as compared with the original, unheated sample.

F-2. *Stability test, Type III*—Wet a portion of the material with distilled water and let the mixture stand for 24 hours at room temperature. There should be no appreciable darkening of the material.

F-3. *Hydrogen ion content*—Mix 1 g of the well-mixed sample with 100 ml of carbon dioxide-free distilled water at 25° C, and determine the pH (at 25° C) of the mixture by means of a suitable pH meter which employs a glass electrode.

F-4. The inspector shall note whether the material meets the specification as to odor, and satisfactoriness for removing oil, grease, etc. (See pars. C-1, C-2, C-3, E-1b, E-2b, E-3b, I-2, I-3 and I-4).

F-5. Deliveries will be sampled and also tested according to the methods contained in Section F of Federal Specification P-S-536. Microscopic examination will also be made to determine the identity or nature of the abrasive.

G. PACKAGING, PACKING, AND MARKING FOR SHIPMENT

G-1. *Packaging.*

G-1a. *Type I*—Hand grit paste soap shall be furnished in tin cans with tight fitting covers and of approximately 1 pound, 2 pounds, or 4 pounds, as specified in the contract or order. (See par. I-7).

G-1b. *Types II and III*—Hand scouring powder shall be furnished in cans; cartons, or bulk, as specified in the contract or order. (See par. I-7).

G-2. *Packing*—Unless otherwise specified, the subject commodity shall be delivered in standard commercial containers, so constructed as to insure acceptance by common or other carriers, for safe transportation, at the lowest rate, to the point of delivery.

G-3. *Marking*—Unless otherwise specified, shipping containers shall be marked with the name of the material, type, and the quantity contained therein, as defined by the contract or order under which the shipment is made, the name of the contractor, and the number of the contract or order.

H. REQUIREMENTS APPLICABLE TO INDIVIDUAL DEPARTMENTS

H-1. The following departmental specifications of the issue in effect on date of invitation for bids, and special requirements shall form a part of this specification, and shall be applicable to purchases made under this specification by the respective departments.

H-2. *Army*—U. S. Army Specification No. 100-2, Standard Specification for Marking Shipments.

H-3. *Navy*—Navy Department General Specifications for Inspection of Material (copies of which may be obtained without cost upon application to the Bureau of Supplies and Accounts, Navy Department, Washington 25, D. C.).

H-4. *Marine Corps*—Instructions issued by the Quartermaster.

I. NOTES

I-1. Purchasers should specify the type desired.

I-2. Purchasers should specify if a mutually agreed upon sample is desired for comparison with deliveries for odor. (See pars. E-1b, E-2b, and F-4).

I-3. The inspector or purchasing officer should determine whether or not the material is satisfactory as regards odor. If unsatisfactory the material should be rejected and not submitted to the testing laboratory for the tests indicated under section F. (See pars. E-1b, E-2b, E-3b and F-4).

I-4. The inspector or purchasing officer should determine whether or not the material is satisfactory as regards the removal of oil, grease, etc., from the hands. If unsatisfactory the material should be rejected and not submitted to the testing laboratory for the tests indicated under section F. (See pars. C-1, C-2, C-3 and F-4).

I-5. *Basis of purchase*—Detergent, hand, paste and powder, for mechanics' use is subject to a possible gain or loss of weight, depending upon packaging, atmospheric or storage conditions, or both. Therefore, the time of computing net weight with reference to acceptance or delivery should be specified in the contract or order.

I-5a. *Type I*—The material should be purchased by net weight, provided the moisture and matter volatile at 105° C does not exceed 55.0 per cent. With deliveries containing less than 55.0 per

(*Turn to Page 78*)

TRADE NEWS. . . .

Offer New Hand Cleaner

Dennis Chemical Co., St. Louis, has announced a new industrial cleansing cream with lanolin base, called "Den-Nex," for removing paints, lacquers, inks and other similar resistant grime from the hands. Applied like soap and rinsed off, the product, it is claimed, eliminates the need for hazardous solvents.

P&G Veteran Retires

Chas. A. Young of the mechanical department of Procter & Gamble's plant at Ivorydale, O., retired recently after 52 years of service. Friends and well wishers marked his departure at an informal gathering in the factory and, with R. B. Collins, superintendent of the inedible division, as master of ceremonies, presented him with numerous gifts as tokens of good will. According to *Moonbeams,* company house organ, "Charlie's" 52 years were topped by his brother, William, who had previously retired after 53 years of service. Together with a third brother, Peter, the Young brothers accumulated 145 years of service with the company.

Eastwood Made Ward Director

George A. Eastwood, president of Armour & Co., Chicago, was elected a director of Montgomery Ward & Co., at the recent stockholders' annual meeting in Chicago.

J. M. Hiebert Sterling V.P.

Dr. J. Mark Hiebert has been elected vice-president of Sterling Drug, Inc., New York, in charge of Frederick Stearns & Co. division, Detroit, it was announced May 3. Dr. Hiebert has been a member of the Sterling organization since 1934 and has been advanced from the position of divisional vice-president and general manager of the Stearns division, to which he was appointed when Stearns was acquired a year ago by Sterling Drug.

Credit Men Elect Felio

Earl N. Felio, assistant treasurer and general credit manager of Colgate-Palmolive-Peet Co., Jersey

EARL N. FELIO

City, N. J., was elected president of the New York Credit Men's Association at the annual meeting of the group at association headquarters, 354 Fourth Ave., New York, May 3. He was scheduled to take office June 1. Mr. Felio has been a vice-president of the association since 1942, and a member of the group's board of directors since 1939. The group was organized in 1895. Born in Niagara, Wisc., Mr. Felio attended Northwestern University and New York University. He is a past president of the Commerce Club of Northwestern University. Among those named to the board of directors of the Credit association was Miss Ida Hill, of Harriet Hubbard Ayer, Inc., New York.

Advance Chicago Lever Mgr.

L. H. "Mac" Macleod, former Chicago division manager for Lever Bros., has been promoted to regional manager for the Chicago, Detroit, Pittsburgh and Minneapolis area. C. H. Maudsley, formerly at Cincinnati, was transferred to Chicago to fill the vacated divisional managership.

R. M. Hollingshead, 77, Dies

Richard M. Hollingshead, 77, founder and president of R. M. Hollingshead Corp., Camden, N. J., died May 15, in Pennsylvania Hospital, Philadelphia, after a brief illness. Born in Millville, N. J., he moved to Camden when he was 20 and established a business that was later to grow into a million dollar corporation. Starting with a formula for making saddle soap and small capital, Mr. Hollingshead soon added a complete line of chemical products for the harness trade. Later, with the advent of the automobile, he began manufacturing products for cars, and this branch of the business soon became the most important. Chemical specialties for household use also hold an important place in the Hollingshead line. Mr. Hollingshead leaves a widow, Mrs. Martha E. Hollingshead, three children by a previous marriage, and four grandchildren. He was a 32nd degree Mason, a member of Lulu Lu Temple; Cyrene Commandery 7 and Camden Lodge 15.

Army Fat Salvage 20,000,000 Lbs.

The Army salvaged 20 million pounds of cooking fats during 1944, according to a statement issued by the Quartermaster Corps. The salvaged fat was sold to soap manufacturers for more than a million dollars. Eight million pounds of trap grease netted $182,000 and 55 million pounds of bones and fat meat trimmings brought $940,000.

NYQ Elects Irving McKesson

Irving McKesson was elected president of New York Quinine & Chemical Works, Brooklyn, it was announced by the company May 17. Other officers elected include: Donald McKesson, vice-president; Francis J. McHugh, secretary; Louis L. Pio, secretary; Francis J. Reid, assistant secretary and Albert A. Young, assistant secretary.

1st Quarter Soap Deliveries

Soap deliveries for the first quarter of 1945 were greater than those of the first quarter of 1944, but less than those of the final quarter of 1944. Dollar volume for the first quarter of 1945 was the highest first quarter in the ten-year period of 1935-45. The figures are based on sales records of 71 manufacturers who regularly report sales totals to the Association of American Soap & Glycerine Producers. Deliveries of soap other than liquid by the 61 manufacturers reporting amounted to 812 million pounds for the first quarter of 1945 or 2.7 per cent more than the 1944 first quarter, but 5.8 per cent less than in the last three months of 1944. Liquid soap deliveries for the 1945 first quarter were 1,154,657 gallons, an increase of 2.3 per cent over the first quarter of 1944, and 20.3 per cent greater than the last quarter of 1944. Total dollar volume for the first 1945 quarter amounted to $111,969,332, of which $110,669,305 was for other than liquid soaps and $1,300,027 was for liquid soaps.

—— • ——

Review P&G Dividend Plan

A total of $21,340,000 has been paid by Procter & Gamble Co., Cincinnati, to employee profit sharers since the origin of this incentive plan in 1887. Over $1,000,000 was disbursed under the plan in 1944, the company's house organ, *Moonbeams*, states. In addition, employees deposited with the profit sharing plan almost $280,000 from their regular pay envelopes, last year, to bring the total employee ownership of company common stock to 139,803 shares.

—— • ——

C-P-P Plans New Stock Issue

Colgate-Palmolive-Peet Co., Jersey City, N. J., is planning to issue new securities in order to reduce fixed charges, it was learned last month. According to E. H. Little, president, the company is considering replacing its 125,000 shares of $4.25 preferred stock with a similar number of shares of a new preferred stock bearing a lower dividend rate. Should the company decide to follow that course, it was said, current holders of the preferred shares would be given the opportunity of exchanging them for new stock, but any shares not exchanged would be redeemed at $101 a share, plus accrued dividends. Dillon, Read & Co., New York, are expected to head the group underwriting the exchange offer.

Planned to appeal to the feminine shopper, the new "Vapair," room deodorant package has been designed to give a clean, fresh feeling, and at the same time, through studied merchandising design, presents the trade name so that it can be seen from shelf level. The label is lithographed in green, red and cream.

—— • ——

See Increased Glycerine Demand

The postwar demand for glycerine is expected to equal or exceed that of the prewar period, providing a high level of gross national production and national income exists when the final peace comes, according to a recent statement of C. A. Rogers, of the chemical unit of the Bureau of Foreign and Domestic Commerce. Consumption of glycerine in explosives for clearing war-devastated cities, towns, harbors and other demolished areas is expected to approximate the wartime use of glycerine in military ammunition it was stated.

—— • ——

F. J. Arthurs is Dead

Frederic J. Arthurs, 65, president of Arthurs-Buffalo Chemicals, Inc., distributors of chemicals, soaps and raw materials and jobbers for industrial, institutional, municipal and general trade, Buffalo, N. Y., died May 23. Mr. Arthurs operated since Sept. 1, 1938 as F. J. Arthurs and in March of this year incorporated as Arthurs-Buffalo Chemicals, Inc.

—— • ——

Coulter, C-P-P, V.-P., Retires

James A. Coulter, vice-president in charge of manufacturing and a member of the board of directors of Colgate-Palmolive-Peet Co., Jersey City, N. J., has retired, it was learned late last month. Mr. Coulter joined the Palmolive company in Milwaukee in May, 1923. No successor has been named as yet.

—— • ——

Dicalite Changes Announced

E. T. Frankenhoff, vice-president of Dicalite Co., producers of diatomaceous earth, New York, moved his headquarters from Chicago to Los Angeles, the company announced May 4. He has been with Dicalite since its organization as manager of the central division. A. G. Frankenhoff, who was made vice-president and general manager early in 1945, will continue in New York as manager of the eastern division.

U. S. I. Buys Dodge & Olcott

U. S. Industrial Chemicals, Inc., New York, announced May 25, that they had purchased the assets and business of Dodge & Olcott Co., New York. Dodge & Olcott will continue to be operated as a separate entity under the D & O name and will retain its present management, headed by Francis T. Dodge, president, Charles E. Myers, V. H. Fisher and Charles Homan, vice-presidents, according to the announcement of Glenn L. Haskell, president of U. S. I. Other officers of the company include R. W. Bush, secretary, J. A. Corson and J. W. Booth, assistant secretaries, F. H. Kirn, treasurer, and L. F. Schwartz, assistant treasurer. Russell B Stoddard will continue in charge of the insecticide department.

Dodge & Olcott Co., the oldest American essential oil house, traces its origin back to 1798, when the company's few products were sent from England by packet ship. Prior to the war, Dodge & Olcott's principal business was the sale of essential oils, flavors, oleo resins, aromatic chemicals and kindred products to the soap, perfumery, pharmaceutical, food and similar industries. With the broadening of the war zone many imported materials for these industries were cut off from the essential oil industry and a number of substitute products were developed. Recently the company has concentrated on the development of products for the insecticide and disinfectant industry, which products are expected to dovetail with the activities of U. S. I., who make, among other things, the insect repellent, "Indalone." Dodge & Olcott have also produced a refined pyrethrum extract for use in Aerosol "bombs."

Market New "Celebrity" Soap

Duchess D'Andre, Chicago cosmetics and toilet accessories firm at 145 N. Clark St., introduced its new "Celebrity" cold cream soap to the trade early in May with advertisements in eight national publications. Offered in a colorful gift box containing three generous toilet size cakes sculptured in pleasing floral design, the package retails at $1.00. Three odors and colors are available. Yellow and pink colors are used in the container design.

Consumer publications used in the advertising campaign include *Mademoiselle, Life Story, Photo Play* and *Secrets,* while the trade field was reached through *Department Store Economist, American Druggist, West Coast Druggist,* and *Pacific Drug Review.* Distribution of the product for Duchess D'Andre is being handled by Elmer J. Engel Co. Heading the Duchess D'Andre organization is George E. Hargrave, widely known operator of a private detective agency, who according to Mr. Shields, embarked on the cosmetics venture several years ago "by accident."

FTC Cites Superior Soap

Superior Soap Corp., Brooklyn, has come to an agreement with the Federal Trade Commission that it will stop claiming that a soap that does not contain olive oil exclusively is an olive oil soap, it was announced late in May. The stipulation does not prevent the use of a brand name containing the word "olive" to describe or designate soap containing olive oil combined with other oils if it be clearly and truthfully designated that such soap is not made wholly of olive oil, provided that olive oil is present in the soap in sufficient amount to substantially affect its detergent or other qualities.

McKelvy Board Chairman

Alfred D. McKelvy, formerly president of Alfred D. McKelvy Co., New York, manufacturers of "Seaforth" toiletries for men, and a subsidiary of Vick Chemical Co. is now chairman of the board of the company, it was made known recently. In his new capacity he will devote himself to the development of new products and post-war planning.

Revise Laundry Soap Specifications

A number of federal specifications for soaps are being revised to eliminate specific permissible maximum glycerol content. The revised specifications now provide that glycerol content be "no greater than is consistent with War Food Administration orders in effect for commercial soaps at the time bids are invited." Specifications so revised recently include those for laundry chip soap, rosin-type, (P.S.-581) and for granulated laundry soap, rosin-type (P.S.-583).

Bowman Skotch Products Head

H. C. Bowman is president of Skotch Products Corp., Cleveland, not H. C. Brown as we erroneously stated in our news story last month regarding the removal of the company to new quarters.

T.G.A. Reelects Brooks

Herman B. Brooks, president of Coty, Inc., New York, has been reelected for his tenth consecutive term as president of the Toilet Goods Association, Inc., in an election by mail

HERMAN B. BROOKS

that was concluded late in May. Officers elected to serve with Mr. Brooks until May, 1946, were: vice-presidents, Paul H. Douglas, Bourjois, Inc., William M. Bristol, Jr., Bristol-Myers Co. and H. P. Willats, Colonial Dames, Inc.; treasurer, Paul F. Vallee, Roger & Gallet; vice-chairman of the scientific section, Dr. Mark Tapley, of Sterling Drug Co.; secretary, Joseph Keho, Dorothy Gray, Ltd., New York.

McVaugh Joins R. Peltz

Justice H. McVaugh was recently appointed a sales representative of R. Peltz Co., sales representatives for refiners and importers of oils, chemicals, gums, waxes, etc., Philadelphia. Mr. McVaugh is a graduate of Drexel Institute and has a background of technical experience.

Son of M. V. Eusey Killed

Merritt V. Eusey, of Pasadena, Calif., assistant to the president of the Florasynth Laboratories, Inc., at the Los Angeles office, has just received an announcement from General Vandergrift, Commanding Officer of the U. S. Marine Corps in the South Pacific, of the death in action of his son, Captain Charles J. Eusey on Iwo Jima. Captain Eusey, was leading his company of Marine Paratroopers in the invasion of Iwo when he was killed. Merritt V. Eusey, himself a former captain in the armed service in World War I, has two other sons in the Service, Merritt, Jr., and Don, both half brothers of the stricken Marine.

Monsanto Advances H. V. Moss

Transfer of Henry V. Moss from the research laboratory of Monsanto Chemical Co., St. Louis, at Carondelet, Mo., to Anniston, Ala., where he will be supervisor of inorganic research, was announced by the Phosphate division May 9. In addition, the entire research activities at Carondelet have been transferred to Anniston to improve coordination of the two sections. Mr. Moss studied at Columbia University, New York, and in 1938 joined Swann Chemical Co., which was subsequently acquired by Monsanto in 1935.

O'Keeffe, Proctor & Schwartz, V.P.

George W. O'Keeffe, dryer division sales manager for the past two years for Proctor & Schwartz, Inc., Philadelphia manufacturers of industrial drying equipment and textile machinery, was named vice-president in charge of dryer division sales, it was announced last month. Mr. O'Keeffe, a graduate of Stevens Institute of Technology, has been with Proctor & Schwartz since shortly after the first world war, in which he served as an officer.

Boston BIMS Golf June 19

The BIMS of Boston will hold their first of three 1945 golf outings on June 19, at Commonwealth Country Club, it was announced late last month. The second outing will be held July 19, at Woodland Golf Club. The final outing will be held some time during the fall with details to be announced later.

Alfred Stone, 48 Dies

Alfred Stone, 48, who was associated with his mother in Stone Chemical Laboratories Co., Chicago, died suddenly recently. He had been active in the company since 1937. A wife, Lillian, his son William Jr. and his mother survive him.

Chemical Salesmen Hear Dow

Weed killers were cited as an example of the type of agricultural product that would be a potential mar-

DR. WILLARD H. DOW

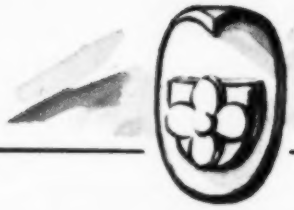
ket for the chemical industries in the future by Dr. Willard H. Dow, president of Dow Chemical Co., Midland, Mich., in an address at a luncheon meeting of the Salesmen's Association of the American Chemical Industry, at the Hotel Commodore, New York, May 22. He told of a weed killer developed by Dow that paradoxically encourages the rate of growth of vegetation to such an extent that all living parts of the plant become exhausted. After tracing the growth and development of Dow Chemical Company, Dr. Dow went on to discuss the direction of future trends in the chemical industry.

Charles F. Alexander, of L. Sonneborn & Sons, president of the association, presided. Guests at the luncheon included. August Merz, president of the Synthetic Organic Chemical Manufacturers Association; S. W. Jacobs, vice-president of Niagara Alkali Co.; James Kerrigan, vice-president, of Merck & Co., and Harry L. Derby, president, American Cyanamid & Chemical Corp. Ralph E. Dorland, manager of the Dow, New York office, acted as toastmaster.

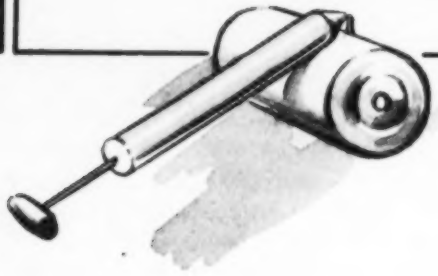
Detrex Transfers Cooper

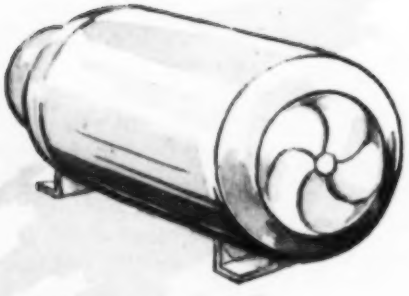
Detrex Corp., Detroit, has announced transfer of Joel N. Cooper from Michigan to New England territory, where he will supervise sales of alkali and emulsion products, with Meriden, Conn., as his headquarters.

ANNOUNCING....



NEUTROSCENTS





THESE REFRESHINGLY NEW SCENTS are just what spray and deodorant manufacturers are looking for to give timely lift to their post-war sales. Designed to neutralize all traces of offensive odor and to substitute, instead, clean, fragrant and appealing scents, these interesting compounds open new fields of endeavor for the market-wise manufacturer. Consider just a few of the odorizing and de-odorizing uses to which **NEUTROSCENTS** may be applied and you will see that there is probably a niche in your future, if not your immediate manufacturing program, in which one or more of the present available selection of thirty distinctive **NEUTROSCENT** compounds may be employed. For example: hospitals, sick rooms, refuse disposal plants, smoking rooms, theatres, restaurants, kitchens, convention halls, institutions, wash rooms and countless others. Their use by every practical method of dispersion has also been carefully anticipated, i.e., by simple open receptacles, by spraying devices, by aerating and air conditioning machines and other dispersion and evaporation devices.

To anyone interested in the profit possibilities opened up by **NEUTROSCENTS,** we will gladly supply a bulletin which describes this entire group in full detail — odors, prices, uses, etc. You will receive this by return mail — and without obligation — for the asking.

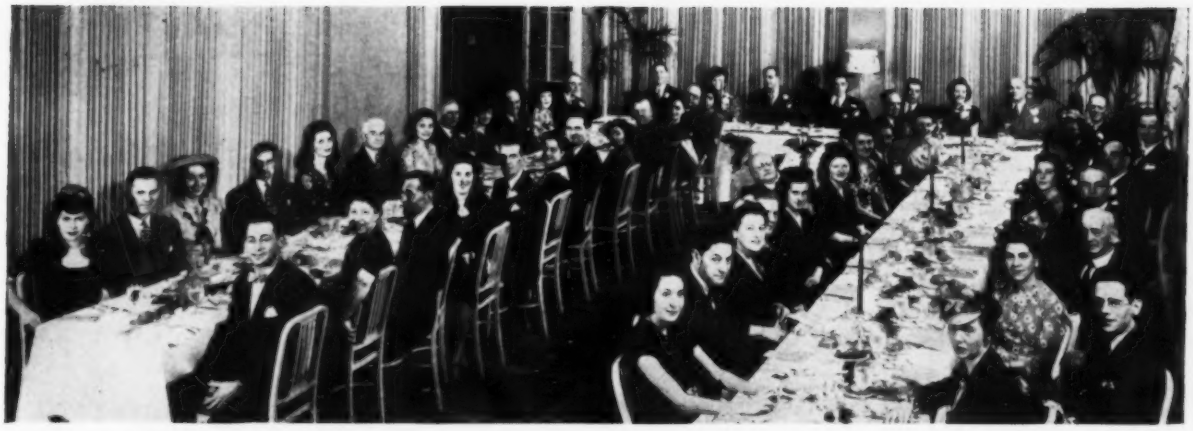
FRITZSCHE BROTHERS, Inc.

PORT AUTHORITY COMMERCE BLDG., 76 NINTH AVENUE, NEW YORK 11, N.Y.

BRANCH STOCKS

BOSTON CHICAGO LOS ANGELES ST. LOUIS TORONTO, CANADA MEXICO, D. F.

FACTORIES AT CLIFTON, N. J. AND SEILLANS (VAR) FRANCE



Gathered for the dinner celebrating the induction of Milton Stern, assistant sales manager, into the Magnus, Mabee & Reynard Co., 20 year club, is this group of MM&R employees. The dinner was held at the Hotel Astor, New York. Of the 18 members of the MM&R 20 year club, 12 are still active, including P. C. Magnus, president, and J. B. and R. B. Magnus, vice-presidents. Bill Fischer, sales manager, oldest member of the club from point of service, was toastmaster.

Cosmetics Industry Quota Set

A quota of $23,000 has been accepted by the cosmetics industry as its share in the Greater New York Fund's eighth annual campaign, it was announced in May by John M. McShane, president of Pacquin, Inc., and chairman of the Fund's Cosmetic division. Serving on Mr. McShane's committee are: William Bonyan, general manager of Daggett & Ramsdell; Charles W. Darr, secretary of Harriet Hubbard Ayer, Inc.; Wallace E. Foster, *American Druggist;* William G. McMahon, Topics Publishing Co.; J. I. Poses, sales manager of A. A. Van Tine Products Corp.; J. V. Powers, vice-president of Fougera & Co.; L. R. Root, Scoville Mfg. Co., and J. P. Walker, of Hazel-Atlas Glass Co.

—— • ——

Continental Can Appointments

The following announcements were contained in a recent release from Continental Can Co., New York: Army-Navy "E" Awards were recently conferred on company plants 33 and 77, Chicago, for excellence in producing various war components. A new fiber container manufacturing plant was opened in Watertown, N. Y. Changes in personnel announced by the company included James J. Harris and Raymond L. Klackle, who have joined the research department; Mr. Harris as special assistant to the director of the customer research division and Mr. Klackle as crop consultant to the same division. D. C. Statler, formerly local sales manager of the Memphis office was transferred to St. Louis where he will act as sales office manager. J. C. Krech will handle all sales in the Memphis area as sales representative under J. M. Porter in New Orleans.

—— • ——

American Can Personnel Changes

Thomas F. Brennan, formerly manager of the metropolitan New York district for American Can Co., New York, was appointed a sales division manager, effective May 14, the company announced last month. Mr. Brennan will maintain his office in New York and will manage the non food container division. Other personnel changes announced by the company included Robert Hollister, formerly assistant manager of the company's metropolitan New York district, who was appointed manager of the district, and C. J. Heintz, formerly an assistant sales manager of the Philadelphia district, who was named to a similar post in the metropolitan New York district.

—— • ——

Hercules Research Appointments

Two new appointments in the research department of Hercules Powder Co., Wilmington, were announced by the company in May. Dr. Robert W. Cairns, who has had 10 years experience in Hercules research, as research chemist, group leader and director of the company's experiment station, was named assistant director of research. Dr. Raymond F. Schultz, who has been acting director of the experiment station since the first of this year, and who has been with the company since 1941 and before that with E. I. du Pont de Nemours & Co., was named director of the Hercules experiment station.

—— • ——

Givaudan Produces Soap Germicide

Givaudan - Delawanna, Inc., New York, are now in production on a new germicide, claimed to be non-toxic and non-irritating that retains its full bactericidal power when incorporated into soap. The germicide, known under the trade name of "G-11," is chemically 2′, dihydroxy 3, 5, 6, 3′, 5′, 6′ hexachloro diphenylmethane. The type of soap base is said to have no significant influence on the bactericidal action of "G-11", with the possible exception that it must contain a fairly large quantity of cocoanut oil fatty acids in order to be effective against the typhoid and coli bacteria. Soap containing "G-11" is reported by the company to have been extremely effective in killing staphylococcus aureus. The new product and its use in soap were described in two articles in SOAP AND SANITARY CHEMICALS, issues of March and April, 1945.

Spotting Trails

OVER STRANGE TERRAIN

VISIBLE BY NIGHT, invisible by day—that's a must for the land buoys planted to guide our armed forces at night through unknown country.

Markers coated with Vita Var Phosphorescent Paint, manufactured by Vita Var Corporation, Paint Engineers, Newark, N. J., fill the bill.

To assure efficient, economical packaging and complete protection for their product, the makers of Vita Var use Crown Cans.

★ ★ CROWN CAN ★ ★

INDEPENDENT AND HELPFUL

CROWN CAN COMPANY • NEW YORK • PHILADELPHIA • DIVISION OF CROWN CORK AND SEAL COMPANY, BALTIMORE, MARYLAND

BIDS AND AWARDS

WFA Soap Needs

The War Food Administration, Washington, D. C., announced May 3, contemplated purchases of 9,490,000 pounds of toilet, laundry, and carbolic soaps. Of these, three million pounds are to be four-ounce wrapped toilet soap for delivery from July 10 to Dec. 10, 1945; 750,000 pounds of four-ounce wrapped carbolic soap for delivery over the six months July 10-Dec. 10, 1945; two million pounds of yellow laundry soap, approximately nine to 12-ounce wrapped, delivery for same periods as above; and 3,740,000 pounds of one to five-pound unwrapped yellow, blue streaked or blue mottled laundry soap for delivery June 10 to Aug. 10, 1945. Bids are to be submitted on Offer Form PBO-479 in original and three signed copies and are to be sent to Contract Development Section, Procurement and Price Support Branch, Commodity Credit Corp. (OS), War Food Administration, Washington 25, D. C.

Day & Frick Grit Soap Award

Day & Frick Co., Philadelphia, submitted a low bid of 4.38c which was accepted on 468,000 pounds of grit soap for the Norfolk, Va., and Spokane, Wash., yards in a recent opening for miscellaneous supplies by the Navy Department Bureau of Supplies and Accounts, Washington, D. C. Other bidders and their bids included: Newell Gutradt Co., San Francisco, 6.08 and 5.28c and Eagle Soap Co., Brooklyn, 5.65c.

Fuld Low on Soap Bid

With a low bid of 7.75c, Fuld Bros., Baltimore, received the award on 23,400 pounds of toilet soap-borax compound in a recent opening for miscellaneous supplies by the Navy Department, Bureau of Supplies and Accounts, Washington, D. C. Other bidders and their bids included: Hockwald Chemical Co., San Francisco, 10.5c; Chicago Sanitary Products Co., Chicago, 11.68c; Flash Chemical Co., Cambridge, Mass., 13.5c; International Supply Co., Cambridge, Mass., 13.5c; H. J. Kline Co., San Francisco, 8.5c; Mione Mfg. Co., Collingdale, Pa., 8.4c; Pacific Coast Borax Co., 10.825c; G. H. Packwood Mfg. Co., St. Louis, 8c; Sanitex Products Co., Los Angeles, 9c and Imperial Products Co., Philadelphia, 8.4c.

Marine Soap Award to Fels

In a recent opening for miscellaneous supplies by the U. S. Marine Corps, Philadelphia, Fels & Co., Philadelphia, submitted a low bid of 9.25c, which was accepted, on 1,800 pounds of soap chips. Also bidding were Swift & Co., Chicago, 11.25c and National Milling & Chemical Co., Philadelphia, 10.9c.

Navy Insecticide Award

Carlton-Western Co., San Francisco, received the award on 12,600 gallons of liquid insecticide at 66c in a recent opening for miscellaneous supplies by the Navy Department Bureau of Supplies and Accounts, Washington, D. C.

N. Y. Navy Wax Bids

The following bids were received on 1,000 gallons of floor wax in a recent opening for miscellaneous supplies by the New York Navy Yard, New York: Windsor Wax Co., Hoboken, N. J., 91c; R. M. Hollingshead Corp., Camden, N. J., 98c; Twi-Laq Chemical Co., Brooklyn, 65c; A. L. Cahn & Sons, New York, 74c; Penetone Co., Tenafly, N. J., 76c; Buckingham Wax Co., Long Island City, N. Y., 76c; Oil Specialties & Refining Co., Brooklyn, 80.5c; Fuld Bros., Baltimore, 90c; Uncle Sam Chemical Co., New York, 90c; Huntington Laboratories, Huntington, Ind., $1.04 and O-Cedar Corp., Chicago, $1.45.

Treasury Soap Powder Bids

Among the bidders on 40,000 pounds of soap powder in a recent opening for miscellaneous supplies by the Treasury Department, Washington, D. C., were: Western Chemical & Mfg. Co., Chicago, 3.9c a pound; S. & S. Soap Co., New York, $4.65 cwt; Sterling Soap Co., Philadelphia, 5c and Unity Sanitary Supply Co., New York, 6c.

Navy Salt-Water Soap Awards

The following awards were announced on 1,575,000 pounds of salt-water soap for Spokane, Wash., in a recent opening for miscellaneous supplies by the Navy Department Bureau of Supplies and Accounts, Washington, D. C.: Colgate-Palmolive-Peet Co., Jersey City, N. J., 525,000 pounds at 10.687c; Procter & Gamble Distributing Co., Cincinnati, 525,000 pounds at 10.28c and Olive Oil Soap Co., Paterson, N. J., 525,000 pounds at 12c.

Navy Powdered Soap Bids

Bidding on 190,000 pounds of powdered soap in a recent opening for miscellaneous supplies by the Navy Bureau of Supplies and Accounts, Washington, D. C., were: G. H. Packwood Mfg. Co., St. Louis, 10.76c using sawdust and 12c using cornmeal; National Milling and Chemical Co., Philadelphia, 8.4c; Crystal Soap & Chemical Co., Philadelphia, 11.2c; Peck's Products Co., St. Louis, 11.5c and Hockwald Chemical Co., San Francisco, 14.81c and 11.8c.

Four Lueders' "Veterans" Honored

Four more employes of George Lueders & Co., New York, recently joined the company's "Veteran's Association," a group that is composed of employes who have been with the company for 25 years or more. New members are William Allstadt, John Clifford, Louis Weissenberger and Frank Drugan. A luncheon was tendered each member of the group at the Drug and Chemical Club, and a watch was presented to each man.

George Lueders & Co. have announced the appointment of A. R. Eberhardt to represent them in the states of Wisconsin, Minnesota, Nebraska, Iowa, Arkansas, Oklahoma, as well as Fargo, N. D.; Sioux Falls, S. D.; Kansas City and St. Joseph, Mo. and Denver, Colo.

NEW TRADE MARKS

The following trade-marks were published in the May issues of the *Official Gazette* of the United States Patent Office in compliance with Section 6 of the Act of September 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of publication. As provided by Section 14, fee of ten dollars must accompany each notice of opposition.

Trade Mark Applications

SURE-RITE—This in upper case, extra bold letters within a triangle formed by three light rules, and with three lightning strokes for liquid fabric cleaner and spot remover. Filed Nov. 10, 1944, by Sure-Rite Products Co., Philadelphia. Claims use since June, 1936.

GOLDEN ARROW—This in upper case, extra bold, stencil letters in quotes for facial and bath soaps. Filed Dec. 14, 1944, by Golden Arrow Toiletries, New York. Claims use since June 16, 1945.

BARRAGE—This in upper case, bold letters for insect repellent. Filed Jan. 12, 1945, by Lehn & Fink Products Corp., Bloomfield, N. J. Claims use since Nov. 24, 1944.

(Trade mark consists of two small children facing each other and wearing undershirts only) for toilet and bath soaps. Filed Dec. 19, 1944, by Swift and Co., Chicago. Claims use since Jan. 15, 1895.

SOLV-O-SOIL — This in upper and lower case, extra bold, black letters for solvent and detergent for cleaning and spotting fabrics. Filed Dec. 30, 1944, by Price Detergent Co., Shelton, Wisc. Claims use since Aug. 15, 1944.

RENOIR—This in upper and lower case, script letters beneath the drawing of the French painter, Pierre Renoir, for toilet soap. Filed Jan. 3, 1945, by Renoir Parfums, Ltd., New York. Claims use since Dec. 28, 1944.

HIGHLAND—This in upper case, bold letters for toilet soap and shaving cream. Filed Jan. 12, 1945, by M. de Tuvache, New York. Claims use since Nov. 8, 1938.

DIPLOMAT—This in upper and lower case, bold, script letters for toilet soaps. Filed Jan. 22, 1945, by Ivor Rich, New York. Claims use since Aug. 15, 1944.

PALMOLIVE—This in upper case reverse letters on a black rectangular background that has a circular design at one end and in which is the word "Palmolive" for toilet soap. Filed Jan. 16, 1945, by Colgate-Palmolive-Peet Co., Jersey City, N. J. Claims use since Jan. 16, 1945, for the mark and since Jan. 1, 1900, for the word "Palmolive."

WOODHEALTH—This in upper case, extra bold, black letters for wood preservative and termite destruction preventive. Filed Jan. 27, 1945, by Protection Products Mfg. Co., Kalamazoo, Mich. Claims use since Sept. 1, 1944.

BATTLESHIP WAX—This in upper case, bold letters beneath the fanciful drawing of a battleship for wax and furniture polish. Filed Jan. 5, 1945, by New England Distributors, Manchester, N. H. Claims use since Jan., 1942.

FLORITE—This in upper case, bold letters for floor waxing, polishing and cleaning compound. Filed Jan. 8, 1945, by Florite Co., Nacogdoches, Tex. Claims use since Sept. 1, 1944.

CLEAREX—This in upper case, extra bold, black letters for liquid glass cleaner. Filed Aug. 19, 1941, by Unacal Products, Inc., Los Angeles. Claims use since May 21, 1941.

TENPIN—This in upper case, bold letters for shaving soap and shaving cream. Filed Nov. 8, 1943, by Sportline, Inc., New York. Claims use since June 1, 1943.

JA-DA—This in upper case, extra bold, black letters for cleaning compounds for washing dishes, painted surfaces, automobiles, etc. Filed Jan. 1, 1945, by Scientific Supply Co., Denver. Claims use since Aug. 1, 1944.

VERVTEX—This in large and small capitals for soap impregnated paper. Filed Feb. 2, 1945, by Velso Products Co., Burlington, Ia. Claims use since Dec. 28, 1944.

QUAKER-QUASOL—This in upper case, bold, stencil letters for solvent, cleanser detergent. Filed Feb. 3, 1945, by Quaker Chemical Products Corp., Conshohocken, Pa. Claims use since Aug., 1937.

PURENE—This in upper case, bold letters for deodorant. Filed July 26, 1944, by Nash & Kinsella Labs., Inc., St. Louis, Mo. Claims use since July 18, 1944.

CORUMBU—This in upper case, extra bold, stencil letters for synthetic wax. Filed Feb. 24, 1945, by T. G. Cooper & Co., Philadelphia. Claims use since Mar. 27, 1942.

KLEENEE—This in upper case, open, italic letters for general household cleaner. Filed Aug. 16, 1944, by Sicca Soya Paint Co., Peoria, Ill. Claims use since Jan. 1, 1941.

SEE SUDS—This in upper case, extra bold letters, the "s' s" being in the shape of sea horses, for powdered soap compound. Filed Oct. 4, 1944, by "See Suds," St. Louis, Mo. Claims use since Mar. 1, 1944.

(The reverse drawing of a microscope on a rectangular block within a rectangle formed by four medium rules) for leather cleaning and polishing preparation for use in the leather and shoe industries. Filed Jan. 18, 1945, by Wisconsin Chemical Products Co., Milwaukee. Claims use since Mar., 1938.

PLAYSHINE — This in upper case, bold letters for shoe dressing and shoe polishes. Filed Feb. 9, 1945, by Evangeline Products, Inc., Brooklyn. Claims use since Apr., 1939.

DANALAK—This in upper case, extra bold letters for toilet soaps. Filed Feb. 9, 1945, by Les Parfumes de Dana, Inc., New York. Claims use since Jan. 17, 1945.

(The drawing of a six point star above a fanciful design, which is above the letter "s" all in reverse on a black disc background) for tooth paste and disinfectant. Filed Aug. 25, 1944, by Ludwig Scherk, Inc., New York. Claims use since Jan. 1, 1920.

She will—if it has the advantage of FLORASYNTH aromatic appeal . . . It is this vital "please" . . . created by distinctively faithful reproductions of the true floral odors . . . that permeates and distinguishes *your* products from all others . . Florasynth

JASMIN

is one of a wide variety of SOAPAROMES that will add this vital "please" factor to *your* products . . .

Florasynth LABORATORIES, INC.

CHICAGO 6 · NEW YORK 61 · LOS ANGELES 27

DALLAS · DETROIT 2 · MEMPHIS · NEW ORLEANS 13 · ST. LOUIS · SAN FRANCISCO 3 · SEATTLE 4

Florasynth Labs. (Canada) Ltd. — Montreal · Toronto · Vancouver · Winnipeg Florasynth Laboratorios de Mexico S. A. — Mexico City

BRIZA—This in upper case, extra bold, black letters for tooth paste, disinfectant and chemical rust preventives. Filed Aug. 30, 1945, by Ludwig Scherk, Inc., New York. Claims use since Sept. 1, 1926.

ROCKET—This in upper case, extra bold, black letters for insecticides. Filed Jan. 26, 1945, by Rocket Products Co., St. Louis, Mo. Claims use since Dec. 15, 1943.

TENEFF—This in upper case, extra bold, black letters for insecticides and fungicides. Filed Jan. 27, 1945, by Stauffer Chemical Co., San Francisco. Claims use since Sept. 11, 1944.

N-R-S DUST—This in upper case, extra bold, black letters for chemicals and insecticides for spraying and dusting purposes. Filed Jan. 29, 1945, by Central Chemical Corp. of Maryland, Hagerstown. Claims use since Feb. 21, 1944.

RAMPLEX—This in upper case, bold letters for anti-mildew agent. Filed Feb. 19, 1945, by Rampel Chemical Co., Mount Vernon, N. Y. Claims use since June, 1941.

REE-NU-LITE—This in upper and lower case, extra bold, black, script letters for floor cleaning and polishing compound. Filed Sept. 15, 1944, by Carsello Chemical Products, Chicago. Claims use since June 1, 1940.

412,948. Scouring powder. Filed by Behrens Co., Anderson, Ind., July 13, 1944. Serial No. 472,177. Published Jan. 23, 1944. Class 4.

412,950. Foam depressant. Filed by Wyandotte Chemicals Corp., Wyandotte, Mich., July 22, 1944. Serial No. 472,540. Published Jan. 16, 1945. Class 6.

412,962. Silver and metal polish and cleaner. Filed by Vita-Var Corp., Newark, N. J., Aug. 16, 1944. Serial No. 473,350. Published Jan. 16, 1945. Class 4.

412,965. Semi-paste form insecticide and fungicide. Filed by National Products Corp., Orlando, Fla., Aug. 24, 1944. Serial No. 473,574. Published Jan. 23, 1945. Class 6.

412,966. Mildewproofing composition. Filed by Roxalin Flexible Finishes, Inc., Elizabeth, N. J., Aug. 29, 1944. Serial No. 473,708. Published Jan. 16, 1945. Class 6.

412,972. Non-metallic abrasive facing textile for cleaning and polishing. Filed by Downy Products Co., Orange, N. J., Sept. 27, 1944. Serial No. 474,656. Published Jan. 16, 1945. Class 4.

412,979. Floor and furniture washing and cleaning compound. Filed by Carsello Chemical Products, Chicago, Sept. 15, 1944. Serial No. 474,225. Published Jan. 9, 1945. Class 4.

412,984. Multipurpose cleaner. Filed by Snow Chemical Co., Portland, Ore., Oct. 3, 1944. Serial No. 474,865. Published Jan. 9, 1945. Class 4.

412,988. Insecticide deposit builders. Filed by California Spray Chemical Corp., Wilmington, Del., Sept. 30, 1944. Serial No. 474,749. Published Jan. 23, 1945. Class 6.

412,990. Insecticides and rodent exterminators. Filed by Rid-All Laboratory, Milwaukee, Oct. 7, 1944. Serial No. 475,076. Published Jan. 23, 1945. Class 6.

412,993. Soy bean insecticide base. Filed by Central Soya Co., Fort Wayne, Ind., Oct. 9, 1944. Serial No. 475,100. Published Jan. 23, 1945. Class 6.

413,000. Insect repellent. Filed by Block Drug Co., Jersey City, N. J., Oct. 12, 1944. Serial No. 475,237. Published Jan. 23, 1945. Class 6.

413,006. Liquid air purifier and deodorant. Filed by John C. Stalfort & Sons, Inc., Baltimore, Oct. 17, 1944. Serial No. 475,401. Published Jan. 23, 1945. Class 6.

413,017. Effervescent tablets for cleaning false teeth. Filed by Lucident Co., Elizabeth, N. J., Oct. 30, 1944. Serial No. 475,831. Published Jan. 16, 1945. Class 4.

413,020. Shaving creams. Filed by Ormont Drug & Chemical Co., Long Island City, N. Y., Oct. 30, 1944. Serial No. 475,864. Published Jan. 16, 1945. Class 4.

413,026. Colloidal skin cleansers. Filed by Personal Luxuries Co., New York, Nov. 7, 1944. Serial No. 476,199. Published Jan. 16, 1945. Class 4.

413,098. Toilet soap. Filed by Pinaud, Inc., New York, Nov. 4, 1943. Serial No. 464,719. Published Jan. 23, 1945. Class 4.

413,242. Bactericidal and fungicidal compositions. Filed by Gallowhur & Co., New York, Jan. 27, 1944. Serial No. 466,909. Published Feb. 6, 1945. Class 6.

413,243. Deodorant for poultry brooders. Filed by J-D Chemical Co., Omaha, Nebr., Feb. 26, 1944. Serial No. 467,783. Published Aug. 29, 1944. Class 6.

413,244. Liquid shampoo. Filed by Lightfoot Schultz Co., New York, Mar. 1, 1944. Serial No. 467,894. Published Feb. 6, 1945. Class 6.

413,266. Lather oil hand cream. Filed by U. S. Sanitary Specialties Corp., Chicago, Aug. 17, 1944. Serial No. 473,400. Published Nov. 7, 1944. Class 4.

413,271. Wax, polisher and cleanser. Filed by Pur-O-Zone Chemical Co., Lawrence, Kans., Sept. 4, 1944. Serial No. 473,809. Published Jan. 23, 1945. Class 16.

413,278. Brush cleaner. Filed by Wilson-Imperial Co., Newark, N. J., Sept. 15, 1944. Serial No. 474,260. Published Jan. 23, 1945. Class 16.

413,281. Disinfectant. Filed by Louella Mfg. Co., Los Angeles, Sept. 23, 1944. Serial No. 474,563. Published Jan. 30, 1945. Class 6.

413,291. Cleaning and polishing material for a number of different surfaces. Filed by Vita-Var Corp., Newark, N. J., Oct. 7, 1944. Serial No. 475,087. Published Jan. 30, 1945. Class 4.

413,302. Shaving sticks. Filed by Lentheric, Inc., New York, Oct. 21, 1944. Serial No. 475,578. Published Jan. 30, 1945. Class 4.

413,331. Soap in finely divided pearl-like form. Filed by Lever Brothers Co., Cambridge, Mass., Nov. 23, 1944. Serial No. 476,806. Published Jan. 30, 1945. Class 4.

413,517. Household cleaner. Filed by Gail Chemical Co., New York, Nov. 8, 1944. Serial No. 476,263. Published Feb. 14, 1945. Class 4.

413,518. Dentifrices. Filed by Arthur Williams, Washington, D. C., Nov. 14, 1944. Serial No. 476,453. Published Feb. 15, 1945. Class 6.

RAW MATERIAL MARKETS

As of May 28, 1945

THE announcement of the end of the War in Europe early last month brought with it no assurance of an early easing in the supply outlook for soap raw materials, particularly fats and oils. On the contrary, there are a number of indications that supplies, particularly fats and oils, will be as tight or tighter than they have been since the start of the war. The oils and fat situation will be definitely bad for the remainder of the year. This is particularly true of edible fats and oils, and will also be reflected in the inedible supply for soaps. A recent report of Leo T. Crowley, chairman of the Interagency Committee on Foreign Shipments to Fred M. Vinson, director of the Office of War Mobilization and Reconversion, stated that the per capita consumption of fats and oils in the United States would probably be reduced to about 36 pounds in 1945, as compared with 42 lbs. in 1944. In addition to a 700,000 long ton reduction in fats and oils production in the United States, it will be necessary to ship about 800,000 long tons to Europe (not including Germany). At the same time, according to a recent UNRRA release, there has been a devastating drought condition in large oil seed producing regions of the world such as Australia and in South American countries. A free world meat supply of about three billion pounds less than were available from similar sources in 1944 is anticipated in 1945.

Lard Output Declining

The lard output continues to slacken off in the United States as fewer though heavier hogs are being marketed. No real relief is expected in the lard situation until the spring crop of hogs is ready to be marketed in the fall. Reserve stocks of lard and rendered fat are regarded as the smallest on record, as shown by a government report as of May 1, which indicated that only 53,000,000 pounds were in cold storage in all positions as compared with 498,000,000 pounds a year ago. Of the quantity held, about 27,000,000 pounds were owned by the government. Chicago stocks of lard increased 1,099,000 pounds during the first half of May and aggregated 4,704,000 pounds, as against 76,342,000 lbs. in 1944. The recent increase in ration points for lard and shortening and curtailment of quotas for bakers and others did not come as much of a surprise to those who follow the lard supply situation closely. Soap manu-

facturers were reported as saying that supplies of tallow and grease were below the demand. Reserve stocks were being drawn upon to meet production requirements. The WFA sold approximately 872 drums of lard declared unfit for food to soap makers.

Form Copra Export Co.

Relief from another direction is hopefully looked for with the formation of Copra Export Management Co. by representatives of five companes engaged in copra trading in the Philippines before the war. This "company" will serve as copra procurement agency in the Philippines for U. S. Commercial Co. and act as agent of the USCC in all transactions involving copra. The situation regarding the quantity of copra available in the Philippines and facilities for getting it to a point where it can be exported are not clearly known in the United States. The probability is that transportation facilities are pretty well broken down in the islands themselves. Restoration of transportation in the islands and reestablishment of production facilities seem to be the main problems. Some method of getting commodities to production centers is required, as is military sanction of the use of shipping facilities from the Philippines. It is thought that the setting up of an agency to act for the USCC will be helpful in dealing with the military on the copra and other questions involving exporting of supplies from the Philippines.

Deny Rosin Price Increase

Rosin, or rather rosin prices, came in for some attention during the month with the announcement by Price Administrator Chester Bowles on May 7, that he would have to turn down informal requests for higher ceiling prices on gum rosin. The request for higher ceilings was sponsored by the American Turpentine Farmers' Association. In his letter to Judge Harley Langdale, president of the association, Mr. Bowles pointed out that existing ceiling prices are well above the minimum required by the Price Control Act, and are far above peacetime levels. Prices are high enough to yield to the great bulk of the industry a margin over cost that should be adequate to permit full production. Meanwhile, gum rosin producers were said to hope to obtain early action on the appeal of the War Food Administration to the Office of Economic Stabilization for higher gum rosin prices. The WFA is believed to have approved an increase of 95c per hundred pounds.

See French Oils Here Soon

Relief in one direction of the supply picture is believed to be contained in the post "V-E" day story that considerable quantities of essential oils are expected to arrive from France shortly. The early arrivals, expected in some quarters within the next two months, are believed to be a part of the spring crop and part of the remainder of last fall's crop. A fair crop of flowers is expected this year, according to reports in some quarters. Other shipments are expected to arrive in anywhere from the next 60 to 90 or 100 days. Easing of the shipping situation is the big factor in the future supply picture.

Consider NUCHAR

for Your Post-War Plans

There are countless reasons why members of post-war planning committees or leaders of the Soap Industry are saying "We must consider purification by *adsorption.*" Early in the battle of wartime production American manufacturers realized that activated carbon offered short cuts to many obstinate purification problems.

Soap manufacturers relied on Nuchar Activated Carbon as an effective and dependable means of purification *by adsorption,* to remove unwanted odors and colors in their products. They found uses for activated carbon that were unheard of before all-out production. The development of new products also required large amounts of activated carbon in their processing. To meet these demands the manufacturing facilities of Nuchar Activated Carbon have been increased and during normal times large quantities of activated carbon should be available to make your product free from impurities. Plan now to include Nuchar Activated Carbon in your manufacturing process. We will be glad to discuss with you its availability in the grade and quantity you will require.

Nuchar Activated Carbons ★ Abietic Acid ★ Snow Top Precipitated Calcium Carbonate ★ Liquid Caustic Soda ★ Chlorine ★ Indulin (Lignin) ★ Liqro Crude Tall Oil ★ Industrial Distilled Tall Oil ★ Tall Oil Pitch ★ Sulphate Wood Turpentine

NUCHAR

INDUSTRIAL CHEMICAL SALES

DIVISION WEST VIRGINIA PULP AND PAPER COMPANY

230 PARK AVENUE, NEW YORK 17, N.Y. — 35 E. WACKER DRIVE, CHICAGO 1, ILLINOIS — 748 PUBLIC LEDGER BLDG., PHILADELPHIA 6, PA. — 844 LEADER BLDG., CLEVELAND 14, OHIO

PRODUCTION SECTION

Fatty Acids from Paraffins

FATTY acids have been made from petroleum on an industrial scale since about 1936, by the Deutsche Fettsaure Werke, who later entered into a working agreement with the I. G. Farbenindustrie A.-G. The types of paraffin hydrocarbons suitable for conversion into fatty acids are rather limited. The principal suitable material available in Germany was the waxy paraffinic by-product produced in the synthesis of gasoline by the Fischer-Tropsch process.

Numerous by-products lower the yield and detract from the quality of the fatty acids. The most favorable results are obtainable with the oxidation of normal paraffins with 20-30 carbon atoms.

Oxidation Stage

The raw material is oxidized in the presence of a suitable catalyst and at temperatures which must be kept under accurate control. To minimize the production of over-oxidized material the process is interrupted when only a per cent of the hydrocarbon has been converted. The reaction product is then washed with water and saponified with alkali to remove the catalyst and water-soluble acids. Part of the unsaponifiable matter can be separated from the saponification product mechanically and the rest is separated by a continuous process in which the soap melt is subjected to steam distillation.

When the soap mixture is subjected to temperatures over 300° C., over-oxidized products, particularly oxy acids, undergo a deep-seated conversion into unsaturated fatty acids, and to a smaller degree to unsaponifiable matter. The total unsaponifiable matter separated from the soap is subjected to further catalytic oxidation so that in practice the bulk of the paraffin is converted to fatty acids.

Crude Acids

The crude fatty acids are a mixture of straight and branched-chain products with 4-25 carbon atoms in the chains. They are distilled in vacuo to give 3 main fractions, (1) the forerunnings, (2) fatty acids suitable for soap production, and (3) after-run acids. The residue consists of high molecular fatty acids.

By repeated saponification, heating and steam treatment, after-run acids and also the distillation residue, can be largely converted into acids suitable for soap making, but such reworking reduces the capacity of the plant as a whole and it has been deemed advisable to seek new uses for the products. The residues from the paraffin oxidation process contain fatty acid esters, oxy fatty acids and unsaponifiable constituents.

Sharp separation of forerunnings is of the utmost importance if satisfactory acids for soap making are to be obtained in the main fraction. This requires the use of suitable column stills. The forerunnings are a mixture of liquid saturated and almost wholly straight-chain fatty acids with 4-9 carbon atoms. Waste gases are water-scrubbed.

Methods have been found for converting forerunnings into products of increased chain length, which have possibilities as textile assistants and emulsifiers. Typical of this kind of conversion are the ether carboxylic acids made by the interaction of chlorinated fatty acids with secondary alcohols. The latter are obtained by ketonization and pressure hydrogenation methods from fatty acids. The alkali salts of these reaction products are surface-active and have excellent lime stability.

Yields

The long-chained fatty acids originally produced readily undergo further reaction to lower molecular fatty acids. In order to minimize this further oxidation, the operation of paraffin oxidation is interrupted when only a portion of the hydrocarbon has undergone reaction. Laboratory investigations of the catalytic oxidation of Fischer-Tropsch paraffin-wax residues show that out of a total fatty-acid yield of 55-60 per cent, 20-25 per cent consists of fatty acids with carbon chains of 1 to 9. About 10 per cent of the paraffin is oxidized to carbon dioxide, with a little carbon monoxide. Proportions obtained on the industrial scale are probably similar. Ludwig Mann, *Die Chemie* 1944; through *Chem. Trade J. & Chem. Engineer* 116, 309-11 (1945).

—— • ——

Transition temperatures are reported for the complete series of different alkali palmitates between 25° C. and their melting points, together with their approximate heat effects. For all, one of the transitions can be identified as that at which microscopic external crystalline form gives way to a measure of fluidity. The temperature of formation of neat soap is very nearly independent both of the nature of the cation and of the length of the fatty radical, and is therefore believed to involve a special spatial equilibrium of attractive and repulsive forces between the chains. R. D. Vold and Marjorie J. Vold. *J. Phys. Chem.* 49, 32-42 (1945).

Glycerine Distillation

GLYCERINE distillation can be carried out in a single stage with the aid of modern steam-jet vacuum equipment to give a yield of more than 98.5 per cent. No sweet water is produced and operating costs are cut in half.

Modern stills, operating at a vacuum of 6-12 mm. absolute pressure and a steam pressure not exceeding 100 pounds per square inch in the heating coils, permit distillation with a liquid temperature of 315-20° F. At this low temperature there is a minimum of decomposition of glycerine. About 0.25 pound of blowing steam per pound of glycerine is now used. Old types of stills required as much as 2 pounds of injected steam per pound of glycerine distilled. Since all of the distilled glycerine is condensed in highly concentrated form, little steam is needed for concentrating purposes. With this type of equipment, the over-all steam consumption for all operations is 2½-3½ pounds per pound of glycerine distilled, depending on the size of the plant.

Steam and glycerine vapors leaving the still are passed through a separator to remove entrainment. The glycerine vapors are then condensed in a series of three surface condensers while the steam passes on to a 3-stage steam-jet air ejector. The first surface condenser uses the feed to the still as the condensing medium. This preheater and the second surface condenser or cooler, are maintained at a temperature which will condense most of the glycerine vapor but very little water vapor. The glycerine from these first two condensers is collected in the deodorizer, and is of a gravity required for commercial grades of distilled glycerine.

The third and final surface condenser is run at a lower temperature and condenses the remaining traces of glycerine in the vapors together with some water. This small fraction containing over 90 per cent glycerol, is run to the concentrator where it is condensed to high gravity or dynamite glycerine. Condensate is temporarily held in the receivers under the condensers while finishing and discharging the glycerine in the deodorizer and concentrator. Finished glycerine is pumped from the deodorizer and concentrator under vacuum, so that the vacuum on the unit and the continuity of operation are not disturbed. A 3-stage steam jet-ejector of sufficient capacity to maintain the high vacuum serves the entire distilling plant.

The foots produced are dark yellow color and the salt crystals show clearly, where by former methods of distilling at higher temperatures the foots were a black amorphous mass. The glycerol content of the foots is approximately 14 per cent, so that loss in the foots is about 1 per cent of the glycerol in the crude. It is therefore unnecessary to resort to the former costly and troublesome operation for recovery. Total yields of 97-98 per cent of the glycerol in the crude are obtained in one distillation in the form of salable products. In addition, C.P. as well as dynamite and high-gravity grades are now obtained in one distillation. G. J. Stockman. *Chem. & Met. Engineering* 52, No. 4, 100-1 (1945).

Shaving Sticks

A shaving stick should be superfatted but must be strong enough to hold its shape. A typical formula is the following:

	Parts by weight
Stearic acid (double pressed)	1050
Coconut oil (Cochin grade)	300
Potash lye (50° Be.)	550
Soda lye (45° Be.)	40
Glycerine CP.	100

Coconut oil, glycerine and soda lye are mixed in a crutcher for 15 minutes, when 100 parts of potash lye are added with the crutcher run at slow speed. The rest of the potash lye is run in on top of the soap and the melted stearic acid added in a slow stream with the crutcher running slowly at first, then faster. Mix for a half hour. A sample should show 2 per cent free fatty acid as oleic. Drop the soap into a frame and let cool. Slab, chip and dry to 15 per cent moisture. Mill with the addition of about one-third part by weight of titanium dioxide per 100 parts by weight of soap. Add perfume and plod, shape and cut as usual. E. G. Thomssen. *Drug & Cosmetic Ind.* 56, No. 2, 174-5, 264 (1945).

New Blueing Method

According to Lever Brothers & Unilever Ltd., in British Specification No. 566,810, a combination of ordinary blueing agent such as ultramarine, with a blue fluorescent compound such as methyl umbelliferone, corrects the yellowing of white materials.

This effect was demonstrated by washing new white cotton fabrics with soap 10 times, rinsing after each wash 3 times in clean water, drying and ironing. The fabrics, which acquired a distinct yellow cast, were then rinsed each in a different slightly alkaline blueing solution, one solution containing 0.01 per cent of *beta*-methyl umbelliferone and 0.004 per cent of ultramarine, the other solutions containing different quantities of either *beta*-methyl umbelliferone or ultramarine only.

The fabrics were then dried and ironed. The fabric which had been rinsed in the blueing solution containing both compounds was much superior in whiteness to the fabrics rinsed in any of the other blueing solutions. *Perfumery & Essen. Oil Record* 36, 40-1 (1945).

Portable Water Filter

Water can now be transformed into the chemical equivalent of distilled water by a simple filtration process developed by American Cyanamid and Chemicals Corp., New York, and made available in portable and stationary equipment designed for all types of users. The unit is called "Filt-R-Stil" and utilizes melamine-derived and other resins which act as ion exchangers to transform dissolved salts to acids and then absorb the acids. The final demineralized water has an average salt content of 2 p.p.m. as calcium carbonate. The field unit is designed primarily for use by the Armed Forces.

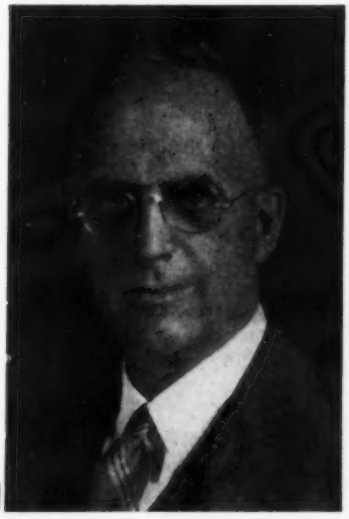
PRODUCTION Clinic

By DR. E. G. THOMSSEN, PH.D.

IT WAS Elbert Hubbard who said that the paramount purpose of business is profits. During the period of war activity, when the emphasis has been upon more and more production, it has been easier to make profits. As normal conditions return and business men realize again that competition will have to be met, closer attention to other details must be given. When volume was as easy to get as has been the case in war years, the objective was upon the obtaining of raw materials and man power to turn out orders. As this honeymoon draws to a close, with the termination of the war, it is well to reflect upon other business routine.

One of these details is costs. Even when business is brisk, costs are important. We have heard most about ceilings in past months. Possibly floors will be searchlighted in the years ahead. It is probably easier to make profits with ceilings even though they have been much criticized, than with floors. To survive when goods are sold at low prices, makes costs vital to profits. While costing is mainly the function of an accountant, production men are also important in this field. We daresay that cost men more frequently consult with production men than vice versa. For that reason it is the duty of a production man to be versed in the elements of cost accounting.

Not so long ago we were visiting at a small plant where a new department had been set up. The manager of the organization was cost



minded but knew very little about cost accounting. His accounting firm was short handed and busy on income tax matters. This manager, who also handled sales, had to depend upon the plant superintendent for his costs. The latter was anxious to get volume so he kept his cost figures down. It was evident to the manager that the department was losing money. We knew quite a bit about factory cost systems so we were consulted and arranged a conference between the manager and superintendent. In brief, it turned out at this conference, that for 90 per cent of the cost items, the superintendent was guessing at his costs and in calculating his overhead he was so far at sea he forgot 90 per cent of the things that go to make up overhead. When we suggested a cost method with which we had long and successful experience in determining factory costs, the superintendent raised constant objections. He felt the costs we calculated were a reflection on his supervising ability. In the end we showed him how wrong he was, in as diplomatic a manner as we could. This antagonistic attitude of production men toward cost systems is typical in many cases. When called upon to furnish costs, the lack of knowledge in the cost accounting field, handicaps them. Good production men should study up cost systems and be prepared to be of assistance when called upon for advice. It is to their advantage to do so.

It is not our purpose here to recommend any type of costing. In our experience, however, a good cost system is most important to the proper operation of a plant. It deserves the full coordination of all factory key men. Without this help it cannot operate properly. Production men should undertand that costs include raw material prices, package costs, yields, losses or gains in handling raw materials, direct labor costs and the ramifications of overhead expenses. Many modern cost systems assess the last upon the direct labor cost, rather than as a percentage upon the entire prime cost. After the factory cost has been determin d, the production man's duties with cost systems are usually over. Costs of administration and selling then become the duty of the accounting department.

It hardly need be said that unless any business men knows the cost of his articles, he cannot operate a successful, profitable business.

Horizontal Plate Filters

The Sparkler Manufacturing Company of Mundelin, Il. have sent us their loose leaf catalogue describing their line of filters which cover, they say, filters for every commercial purpose. Their filters aim to operate economically, to operate with all filter media, to require infrequent cleaning thereby permitting longer filtering cycles and less interruption of service, to be compact and portable, and to be adaptable to the filtration of a range

of volatile liquids to heavy waxes. They specialize in filters for use with oils, fats, waxes, soaps, disinfectants and insecticides. The flow capacities of their filters range from 60 to 10,000 gallons per hour and have cake space capacities from 0.085 to 26 cubic feet. The plates vary in size from 8¼ to 33 inches and the filters are built of stainless steel, bronze, aluminum, monel metal, hard rubber and other special alloys. Perforated metal screens to support paper or cloth when used over the plates are provided to prevent breaking, especially paper under pressure. The latest addition to the Sparkler line is a small filter which may be placed in a line for removing lint and other particles from larger filters used for filtering certain liquids.

Heavy Duty Pumps

The Viking Pump Company of Cedar Falls, Iowa, make a line of rotary pumps which range in sizes from ½ to 1050 gallons per minute. We have had long experience with certain of these pumps under severe conditions of operation and found them to be pumps which give excellent and durable service. In looking over the Viking bulletins, we were impressed with their Bulletin 3000 which describes heavy duty pumps to be mounted with other equipment and Bulletin 2500-40 which describes the same line of completely motorized units. These pumps are offered in capacities of 10 gallons per minute up to 300 GPM. Certain outstanding features distinguish this equipment. An integral thrust bearing makes for superior operation when these pumps are to be used for heavy duty work. An extra long stuffing box eliminates the chance for leaks at that point. An improved relief valve on head assures safe operating against suddenly closed hazardous charge lines and is cheap insurance against this condition which frequently occurs. The valve also eliminates additional steam-fitting in doing away with unions, Ts and joints. A steam jacketed back flange and head may be added to the pump when liquids like molten fats, are to be pumped.

The pumps to be mounted with other equipment are compact and easy to install. The motorized pumps are available as gear driven, as double back geared, as V Belt driven and as direct connected types. They come with revolvable casings and positive thrust bearings and are of rugged construction. In addition to the heavy duty pumps, Viking make pumping units for general purposes, pumps approved by the Underwriters Laboratories to handle hazardous liquids, hydraulic oil pumps, hand driven pumps and a big line of pumps for the process industries.

Liquid Handling Equipment

If those of us who can still buy a gallon of gasoline now and then look at the name of the dispensing pump, it will probably be Bowser. This company originated this pump which handles and meters gasoline, kerosene, distillates and other liquids in fueling trucks and cars. This piece of apparatus is but one of many appliances made by Bowser, Inc., Since 1885 this company has built efficient equipment for the handling of industrial equipment for liquids. Their catalogue describes a wide range which is very generally used to promote efficiency, cut costs, provide safety, economize on labor, secure uniformity in processing and for numerous other applications for the handling and control of liquids.

They index the equipment they make under seven headings, viz;- filtration and distillation, lubrication, metering, pumping, refueling systems, storage and dispensing, and miscellaneous. To enter into a description of these would consume considerable space. It should be stated however, that much liquid handling equipment not available from other sources may be found in the Bowser catalogue. Monel filters, lubricators, oil conditioners, pumps, tanks, overflow sights, sight feed indicators, strainers, check valves, pipe fittings, meters of various types, proportioning systems, flow control valves, remote control valves, barrel draining devices, hose nozzles and other handy equipment are featured in their catalogue. Anyone who handles liquids will find some desirable piece of machinery among the Bowser line.

Laboratory Equipment

The Precision Scientific Company of Chicago, have sent us sections of their catalogue which warrant comment. These have to do with baths, shakers and stirrers for laboratory use. Their constant temperature bath is equipped with a sealed contact mercury thermo-regulator that has a control sensitivity of plus or minus 0.03° C., temperature ranges from room to 100° C. The bath includes a Pyrex jar, cork pad, motor stirrer supports, immersion heaters and thermo regulator equipment. A cooling coil and adjustable shelf are available as accessories. The cost is modest.

Their Kahn shaking machine agitates reaction tubes at a rate of from 275-285 oscillations per minute and is of such sturdy construction as to perform continuously with a minimum of difficulties. The variable speed stirrers they describe have dial controls for a speed range from 250 to 1000 RPM. This stirrer is equipped with an 115 volt AC or DC motor, may be had in three styles and also may be equipped with an electrolytic adapter to convert it into an electrolytic stirrer. It is said to be the only laboratory stirrer that combines a positive gear drive with a built in electric governor that replaces rheostats usually used for varying speeds.

This company also makes and designs a line of laboratory equipment that is stocked or sold through laboratory supply houses.

Container Air Cleaner

The U. S. Bottlers Machinery Co. of Chicago recently prepared and now has ready for distribution, three of a series of new bulletins on container cleaning, filling and packaging equipment. The first three of these bulletins now off the press and ready for distribution are;-

The New U. S. Improved Siphone Filler, The E-Z Air Cleaner, and Hand Washing and Filling Equipment for small Bottling Establishments. Copies of any or all of these may be

obtained by addressing the U. S. Bottlers Machinery Co., 4015 No. Rockwell St., Chicago, Ill. Until other new bulletins are ready, pictures and operational data on fully automatic, high speed and other U. S. equipment may be obtained.

The simple, portable air cleaning unit merits special mention. This machine is a small two tube cleaner that can be furnished with or without a compressor. Two containers from which it is desired to remove lint, dirt, carton lint or other dirt particles may be cleaned at the same time. Containers made from glass, tin, china and other materials may be quickly and thoroughly cleaned. The cleaner is fully automatic except for placing the packages over the nozzles and depressing them. This must be done manually. The machine is entirely closed and streamlined in design. It weighs 220 pounds, is 44 inches high and takes up a floor space of 27 x 14 inches. The dust collector is easily removable for cleaning. The tubes are differently sized for various sized containers and fitted with male threads for attachment to the mechanism that actuates the flow and stoppage of air. A removable panel door permits ready access for examination or repairing of the mechanism. The twin head diagram type compressor delivers 45 lbs. pressure. This is a handy contrivance to have around a plant for smaller manufacturers particularly.

—— • ——

Dow Diamond Exhibit Number

The May issue of the Dow *Diamond*, house organ for Dow Chemical Co., Midland, Mich., is the exhibit issue, and explains and illustrates the various uses to which Dow chemicals are used in the military and industrial war effort and on the home front. The 22-page issue is printed in three colors and the halftones used to print the various illustrations are made from "Dowmetal" photo engraving plates. Dow magnesium, plastics and various other Dow chemical applications are described. Copies of this issue of the *Diamond* may be obtained by addressing Dow Chemical Co., Midland, Mich.

REVISED HAND SOAP SPEC

(*From Page 51*)

cent of moisture and matter volatile at 105° C, settlement should be made on the basis of 55.0 per cent of moisture and matter volatile at 105° C; that is, 0.45 lb. of non-volatile matter should be considered 1 lb. of detergent. For example Moisture and matter volatile at 105° C = 50.0 per cent then:

$$\text{Net weight of material to be paid for} = \frac{\text{Net weight as received} \times (100-50)}{45}$$

I-5b. *Types II and III*—The material should be purchased by net weight, provided the moisture and matter volatile at 105° C does not exceed 10.0 per cent. With deliveries containing less than 10.0 per cent of moisture and matter volatile at 105° C, settlement should be made on the basis of 10.0 per cent of moisture and matter volatile at 105° C; that is, 0.90 lb. of non-volatile matter should be considered 1 lb. of detergent. For example Moisture and matter volatile at 105° C = 6.0 per cent, then:

$$\text{Net weight of material to be paid for} = \frac{\text{Net weight as received} \times (100-6)}{90}$$

I-6. Federal specifications do not include all types, classes, grades, sizes, etc., of the commodities indicated by the titles of the specifications, or which are commercially available, but are intended to cover the types, etc., which are suitable for Federal Government requirements.

I-7. Purchasers should specify the type of shipping container desired and the approximate weight of material per unit. (See pars. G-1a and G-1b).

1-8. If a soap-borax type of hand detergent is desired, it may be procured under Federal Specification P-S-628.

1-9. It is believed that this specification adequately describes the characteristics necessary to secure the desired material, and that normally no samples will be necessary prior to award to determine compliance with this specification. If, for any particular purpose, samples with bids are necessary, they should be specifically asked for in the invitation for bids, and the particular purpose to be served by the bid samples should be definitely stated, the specification to apply in all other respects.

I-10. An Index of Federal Specifications and also a Quarterly Supplement-Index of Emergency Alternate Federal Specifications may be purchased as noted in the paragraph below, price to be obtained from the Superintendent of Documents.

I-11. Copies of this specification, RR-S-366, FF-D-396, P-S-628 and P-S-536 may be obtained upon application, accompanied by money order, coupon, or cash to Superintendent of Documents, Government Printing Office, Washington 25, D. C., price 5 cents each, except P-S-536, 10 cents.

Notice—When Government drawings, specifications, or other data are used for any purpose other than in connection with a definitely related Government procurement operation, the United States Government thereby incurs no responsibility nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use or sell any patented invention that may in any way be related thereto.

—— • ——

Error in Patent Case Report

Attorneys for Lever Bros. Co., Cambridge, Mass., have called our attention to a serious and regrettable error in an article by Leo T. Parker in the April issue of *Soap and Sanitary Chemicals*, commenting on a court decision in the patent infringement case involving Lever Bros. Co. and Procter & Gamble Co. In Mr. Parkers' article, he stated:

"The higher court indicated that the claim was void because it does not supply or give sufficient information of the process so that persons versed in the soap-maker's art could make the soap."

The article then goes on to quote from the court's decision that:

" 'Our patent laws do not require an inventor to be a Lavoisier or a Pasteur. And we think, in this case, too much attention has been paid to fine-spun theories of higher chemistry and too little heed has been given to the intensely practical aspects of the soap-maker's art . . . ' "

The Lever attorneys, comments as follows upon these statements by Mr. Parker:

In the first place, the higher court, that is, the Court of Appeals, did not hold the claims void, but found that they were both valid and infringed, reversing the District Court. In the second place, the Court of Appeals did not indicate that the claimed invention related to "fine-spun theories of higher chemistry" as Mr. Parker's article indicates. The statement which Mr. Parker quotes from the Court of Appeals opinion reflects the attitude of the court in approaching the problem from a practical soap-maker's standpoint rather than from the standpoint of the "fine-spun theories" advanced by the defendant, Procter and Gamble.

It is possible that in stating that the Bodman process as outlined in his article, is unpatentable, Mr. Parker may have misled some soap makers into practicing an infringing process with the attendant liability.

It seems unfortunate that a development which comprises one of the major advances in the soap industry should be stigmatized by the careless and mistaken comments in the Parker article. It is hoped that proper recognition can be made of the Bodman development and the error corrected in reporting the findings of the Court of Appeals with regard to the Bodman patent.

ADVERTISEMENT—*This entire page is a paid advertisement.* *Prepared Monthly by U. S. Industrial Chemicals, Inc.*

U.S.I. CHEMICAL NEWS

June ★ A Monthly Series for Chemists and Executives of the Solvents and Chemical Consuming Industries ★ 1945

Airco Export Corp. to Represent U.S.I. in Foreign Markets

Mr. Glenn L. Haskell, President of U. S. Industrial Chemicals, Inc., has announced that the newly formed Airco Export Corporation has been appointed the selling agent for U.S.I. in all foreign countries except Canada.

In anticipation of a greatly expanding export market, the Airco Export Corporation is directing an intensified program on the sale of U.S.I. chemicals, resins, and other related products.

Airco Export Corporation has opened new offices and display rooms at 33 West 42nd Street, New York. Mr. H. R. Salisbury has been named President of the new corporation. The world-wide coverage of the Airco Export Corporation provides the logical medium through which U.S.I. will make its bid for increased foreign sales of chemicals and resins in the postwar era.

Process Using Ethanol Lengthens Shirt Life

To produce an air-and-water permeable fabric for collars and cuffs which will outwear the shirt, the inventor of a new process proposes a multi-ply fabric impregnated and bonded with ethyl cellulose.

The fabric plies, alternating with layers of cellulose acetate film, are first sewn together to form an assembly. A solution of ethyl cellulose and ethanol is prepared, diluted with water, and the cellulose-fabric assembly is padded through the solution until the fabric is saturated. It is washed, partially dried, and the damp assembly is then subjected to a pressure of 100 lbs. per square inch between plates at 175 deg. C.

The smooth, stiffened fabric thus obtained is integrally bonded together and is thoroughly permeable to air and moisture.

An alternate process uses a di-ortho-xenyl mono-phenyl phosphate plasticizer with ethanol, and ethyl cellulose.

Wear-resistance of these new stiffened fabrics appears to be substantially higher than untreated fabrics, although wear-resistance is decreased by repeated washings.

Chemical Properties Altered By X-Rays

Quartz and other crystalline materials undergo changes in elastic constants and chemical properties when subjected to ultra-short radiation such as x-rays and cathode rays, and to deutron bombardment from a cyclotron.

Of immediate interest is the use of this technique in setting and modifying oscillation frequencies of crystals used to control radio and radar equipment.

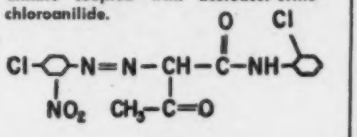
Since irradiation by the new x-ray technique greatly modifies the rate of solution and chemical reaction of crystals, it opens up a new field of photo-chemistry.

Bright Future Seen for Arylides in Making Improved Yellow Dyes

Use of Benzidine and Hansa Yellows Promises to Continue on Large Scale Despite Postwar Return of Chrome Yellows

Although the current shortage of metallic sodium has temporarily halted U.S.I.'s production of acetoacetarylides, the company looks forward to early and large-scale use of these intermediates in the synthesis of Hansa yellows and the newer benzidine yellows which have demonstrated both practical and economical advantages over the chrome yellows.

A typical "arylide" end product, Hansa yellow 3G. Diazotized p-chloro-o-nitro aniline coupled with acetoacet-ortho-chloroanilide.



Originally used as replacements for chrome yellows, these two yellows were found to possess several marked advantages over the unavailable chromes for which they were substituting. Printing inks made with the "arylide" dyes were more workable than those made with chrome yellows. Their greater tinctorial strength made brighter, clearer colors possible for pigmenting paper and protective coatings. This same high tinctorial strength also made the price differential between the new dyes and the chromes insignificant, for they go so much further than the chrome yellows.

Benzidine Yellows

Benzidine yellows are produced by combining tetrazo benzidine with acetoacetarylides. The yellow dyestuffs which result are non-bleeding in water, and in dilute acids and alkalies. In addition, they are fairly resistant to melted paraffin, alcohol and other common organic solvents except chloroform.

By varying the intermediates used, a great number of yellows can be produced having different characteristics of shade and fastness to various agents.

Hansa Yellows

Hansa yellows are made by coupling acetoacetarylides with diazotized aniline derivatives. The resulting dyes are particularly resistant to the action of sunlight and alkalies; qualities which make them desirable for formulating coatings to be used in exposed places. Like benzidine yellows, Hansas can

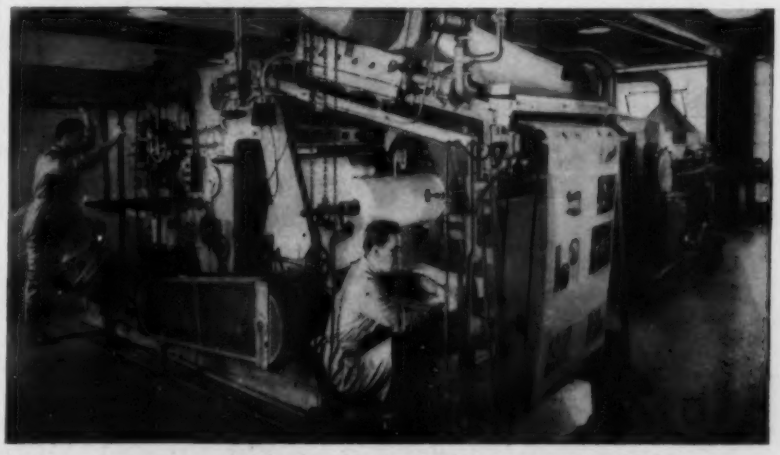
(*Continued on next page*)

Quick Test for Moisture Content of Dried Fish

In the usual method of testing dried fish for moisture, the fish are dried in a vacuum oven at 70 C. A new method, developed in Cape Town, S. A., is faster, and gives results to within 0.5 per cent of those secured by the usual method. The fish are extracted with boiling alcohol for 15 minutes, followed by determination of the critical solution temperature, with a paraffin-white oil mixture.

Analyzes Detergent Mixtures

Mixtures of soap and synthetic detergents may be analyzed by a new method which is said to give accurate results. The alcohol-soluble portion is extracted with ethanol, and the alcohol-insoluble salts are reprecipitated. Soap, fatty matter and alcohol-soluble chlorides are determined directly. Synthetic detergent is the difference between the total alcohol-soluble matter and the sum of soap, fatty matter and alcohol-soluble chlorides.



In the manufacture of colors for inks, Hansa yellows and the newer benzidine dyes have proven to be more practical, and just as economical as the prewar chrome yellows.

June ★ **U.S.I. CHEMICAL NEWS** ★ 1945

Arylide Yellows

(Continued from preceding page)

be produced with widely varying characteristics by varying the intermediates.

Of the many factors that influence the quality and uniformity of Hansa and benzidine yellows, perhaps the most important is the purity of the acetoacetarylide intermediates. The exacting production methods employed by U.S.I. reduce impurities to a negligible minimum. Just as soon as there is an easing in the huge present demand for metallic sodium, U.S.I. will resume production of:

- acetoacetanilide
- acetoacet-ortho-chloroanilide
- acetoacet-para-chlorounilide
- acetoacet-ortho-toluidide
- acetoacet-ortho-anisidide

In addition, U.S.I. has developed the following new compounds:

- acetoacet-para-anisidide
- acetoacet-para-phenetidide
- acetoacetyl-alpha-naphthylamine
- NN'-diacetoacetbenzidide
- acetoacet-cresidide
- acetoacet-dianisidide
- diacetoacetyl-meta-toluylenediamine
- ortho-phenylacetoacetanilide
- acetoacet-para-nitroanilide

Samples of a majority of these intermediates are available for laboratory experimentation.

Ethanol, Acetone and Ether Aid Hormone Preparation

Prolactin, a lactogenic hormone extracted from the anterior lobe of the pituitary, is being used in treatment of cases of delayed or insufficient lactation.

This new biological is prepared by stirring an acetone-dried powder extract of animal anterior pituitaries with ethanol to which concentrated hydrochloric acid has been added. After centrifuging, the supernatant liquid is decanted and precipitated with 1-molar sodium hydroxide to provide a pH value between 7 and 9.

The last step is to settle the precipitate under refrigeration, separate it by filtering or centrifuging, and drying it with ether. Its assay is 10-12 Riddle units per milligram.

Ethanol Used 5 Times To Produce Galacturonic Acid

A purer α-d-galacturonic acid, for use in pharmaceuticals, is claimed for his newly patented process by a Pennsylvania inventor. Starting with a pectin and heated water mixture to which an enzyme system has been added, the solution is allowed to cool to 40 C. Following addition of toluene, the solution is kept at room temperature until the iodine number becomes constant, when it is concentrated under reduced pressure.

After warming to 60 C., ethanol is mixed with the concentrated solution, the insoluble material is permitted to settle, and the remaining sludge is washed by decanting twice with ethanol. Then the decanted wash liquor is chilled, and more insoluble gummy material is permitted to settle.

Following further purification with activated charcoal, the filtrate is concentrated, seeded and chilled. The mass of crystals which forms is broken up, triturated with ethanol, filtered, washed with ethanol and then dried. The resulting product is said to be a very pure α-d-galacturonic acid.

AMERICA'S ONLY "TIN MINES" are in American kitchens. Turn in your empty tin cans regularly.

To study plywood adhesives, U.S.I.'s resin laboratories have designed and built this miniature glue press which duplicates conditions encountered in large presses. The specimen to be laminated is placed between a rubber sheet and a steel plate. Air pressure expands the rubber sheet, firmly and uniformly forcing the plywood against the steel plate. Steam generated within the chamber supplies the heat.

TECHNICAL DEVELOPMENTS

Further information on these items may be obtained by writing to U.S.I.

A coating for magnesium promises to extend the use of this light metal in industry. One coat is said to provide a decorative finish for interior use, while two or more coats give years of outdoor protection. There is also a clear finish for polished magnesium surfaces. **(No. 942)**

USI

A new enamel, intended for painting surfaces exposed to very low temperatures is claimed to be acid-fume resistant, odorless and non-yellowing. Supplied in white, it may be tinted with oil colors. A companion primer is offered for application on asphalt and mastic finishes. **(No. 943)**

USI

A soybean drying oil is claimed to be practically the equal of linseed oil for use in paints, varnishes and synthetic resin products. It comes in two viscosities, F-G and D-E. **(No. 944)**

USI

Maintaining oil viscosity at a given point, and independent of temperature change, is the announced function of a new additive for lubricating and hydraulic oils. **(No. 945)**

USI

A light-colored plasticizer, developed specifically for use in light-colored GR-S stocks and black stocks which will not stain light finishes, is announced. The new compound is said not to affect the rate of cure appreciably. **(No. 946)**

USI

Alternates for citrus oils, to flavor candy and other food products, are announced. Standard flavors are orange, lemon and lime. **(No. 947)**

USI

A new line of metallic phosphates is announced as ready for post-war production. One is said to impart ultra-violet radiation properties to glass, and to give it superior optical, electrical and mechanical qualities. The second, a white pigment, and a third, a source of enriching iron for foodstuffs, are mentioned. **(No. 948)**

USI

New aliphatic derivatives, made up of the even-numbered normal hydrocarbons from C_8 to C_{18}, and their corresponding olefins, alcohols, ethers, mercaptans, etc., are suggested for use in cosmetics, plasticizers, corrosion inhibitors, oil additives, insecticides and stabilizers. **(No. 949)**

USI

A new hand cream to remove paint, as well as lacquer, enamel and resins, is designed to be worked into the skin like soap, then rinsed off with water. **(No. 950)**

USI

A colloidal aluminum-silicate gel, with a particle size ranging from 0.1 micron to 1 micron, is offered with the statement that it may be moderately acidified or alkalized without physical or chemical reactions. It is recommended for use in rubber, adhesives, paints and similar products. **(No. 951)**

USI

To protect frozen foods, a new thermosetting coating, applied by dipping, is described as forming a homogenous protective film over the entire product. **(No. 952)**

PRODUCTS AND PROCESSES

Oil-soluble Soap

A petroleum-oil fraction is oxidized to two types of acids, one type water soluble and one oil soluble. The acids are saponified and the soaps of the water-soluble acid are dissolved in a medium in which the other type is insoluble. Mineral acid is then added to liberate the oil-soluble acids. Oil is introduced as a carrier and the acids dissolved in oil are again saponified to yield oil-soluble soaps. V. N. Jenkins and C. E. Wilson, to the Union Oil Co. of California. Canadian Patent No. 426,760.

Carpet Cleaning Agent

A product for cleaning pile fabrics such as carpets consists of a moist powder. The particles of powder should be 100-325 mesh so that they can be readily brushed into the pile. The surface of the particles carries a volatile adsorbed organic grease solvent sufficient in amount to cut the grease in the pile and dissolve it, so as to liberate the dirt for removal. Bigelow-Sanford Carpet Co. Canadian Patent No. 426,667.

Blown and Filled Soap

Before incorporation of air or gas in soap, in addition to the fillers there is added to the fats anhydrous sodium sulfate dissolved in such a quantity of water that the water will be retained by the salt as water of crystallization. Savonnerie Couvreur S.P.R.L. Belgian Patent No. 447,840.

Dentifrice Base

A free-flowing dentifrice base is composed of a finely ground insoluble powder such as calcium acid phosphate, tricalcium phosphate, precipitated calcium carbonate, calcium sulfate, magnesium carbonate, etc., and a wetting agent. The purpose of the wetting agent is to agglomerate the finely ground insoluble powder and to make it thereby free-flowing, also to improve the cleaning and polishing action of the wet powder. A suitable agent is the sodium salt of dodecyl benzene sulfonic acid or a chemically similar compound. H. V. Moss and T. W. Schilb, to Monsanto Chemical Co. U. S. Patent No. 2,359,326.

Hard-water Soap

A soap capable of dispersing insoluble alkaline earth salts of fatty acids is made of the sodium and potassium salts of suitable acids. Not over 20 per cent of the fatty acids is derived from tropical nut oils such as coconut or palm kernel. At least 50 per cent of the fatty acids are combined with potassium. H. G. Houlton, to The Procter & Gamble Co. U. S. Patent No. 2,358,976.

Surface-active Agents

Murumuru butter or fatty acids from this fat are condensed with a polysubstituted amine such as methyl ethyl amine. The product is treated with a sulfonating or phosphating compound. The sulfonate obtained is neutralized with soda ash and yields a sodium salt in a fine dry powder form. J. P. A. Vallern and, vested in the Alien Property Custodian. U. S. Patent No. 2,350,000.

Phosphates for Hard Water

A fused reaction product of sodium metaphosphate and tetrasodium pyrophosphate is used to soften hard water. The respective quantities range from 50:50 to 20:80. This product is added to the hard water in a quantity sufficient to give a pH of 8-10. C. B. Durgin, R. N. Foster and C. F. Booth, to Monsanto Chemical Co. U. S. Patent No. 2,358,965.

New Absorbent Material

A new absorbent material, "Super-Absorbit," to be used where liquid spillages occur, has been announced by Alexite Engineering Co., Colorado Springs. The material is designed for use where oil, grease, water, syrup, chemicals or liquids are spilled. It may also be used for acid absorption, and is claimed not to become slippery or mat when saturated. It is further claimed that "Super-Absorbit" is always sweepable. It is said to absorb 392.8 per cent of its weight in water and 315.62 per cent in oil. Other properties which "Super-Absorbit" is said to possess include: fireproofness, light weight, dielectricness and minimum abrasive content.

Hercules Resin Emulsifier

A newly developed resin emulsifier which is being used in sizeable quantities in the government's synthetic rubber program was announced last month by Hercules Powder Co,. Wilmington. Made by a special process from rosin, the use of this rosin acid derivative is claimed to give additional tack to rubber. Initial production of synthetic tires made with resin emulsifier was begun in 1944, and the production of both the polymer and tires have been continuing since that time.

Stanco Has New "Dipex"

The development of a lighter color in "Dipex," a molding compound for use in the production of surgical goods in natural and synthetic rubbers was announced early in May by Stanco, Inc., New York. Postwar possibilities for this newly improved product include its use in the molding of white and light colored articles including rubber aprons and sheets, bathtubs for infants and other infants' articles, children's toys, milking machine parts, white wall tires, etc. A similar product of darker color has been marketed for some time by Stanco for use in molding rubber, synthetic rubber and plastics.

Chemical Salesmen to Golf June 19

The Salesmen's Association of the American Chemical Industry will hold its first golf tournament of the 1945 season at the Plainfield Country Club, Plainfield, N. J. Reservations are in charge of U. Harmon, of the Calco Chemical Division of the American Cyanamid Company, Bound Brook, N. J.

NEW PATENTS

Conducted by

Lancaster, Allwine & Rommel

Registered Attorneys

PATENT AND TRADE MARK CAUSES

402 Bowen Building, Washington, D. C.

Complete copies of any patents or trade-mark registration reported below may be obtained by sending 25c for each copy desired to Lancaster, Allwine & Rommel. Any inquiries relating to Patent or Trade-Mark Law will also be freely answered by these attorneys.

No. 2,372,838, Cleansing Mass and Method of Producing the Same, patented April 3, 1945 by Daniel C. Luse, Chicago. The method of producing a cleaning composition in the form of a rigid porous dry compressed mass to be held in the hand and rubbed over the surface to be cleaned, comprising combining approximately nine parts by weight of finely divided magnesite, approximately two and one-fourth parts by weight of finely divided clay, and 24 parts by weight of 18° to 20° Baumé magnesium chloride water solution, mixing the resultant mass for providing a mineral binder, introducing into the mineral binder approximately 12 parts by weight of wood excelsior, mixing the resultant mass, molding the resultant mass, subjecting the molded mass to a pressure of approximately 700 to 800 pounds per square inch to increase the density of the mass, allowing the molded mass to remain without handling after its compression for about five to six hours so that the chemical reaction between the magnesite and magnesium chloride will produce sufficient heat to harden the mass so that it may be handled without breakage, drying the mass to produce the final stiff product and incorporating a soap into the mass.

No. 2,373,133, Sapogenin, Derivatives and Preparation of the Same, patented April 10, 1945 by Russell Earl Marker, State College, Pa., assignor to Parke, Davis & Co., Detroit. The process for preparing a dihydrosapogenin compound which comprises subjecting a member of the class consisting of sapogenins, their side chain mono-chloro derivatives and their side chain mono-bromo derivatives to catalytic hydrogenation under acidic conditions at a temperature not lower than room temperature for a length of time corresponding to at least several hours duration.

No. 2,373,387, Tin Soaps and Preparation Thereof, patented April 10, 1945, by Stanley B. Elliott, Cleveland, assignor to The Harshaw Chemical Co., Elyria, Ohio. A process for the production of basic tin soap compositions, comprising reacting moist stannous hydroxide of the formula Sn(OH) 2 H20, whose elemental tin content is from 25 per cent to 60 per cent, with a monocarboxylic acid, having a boiling point above 175° C. and a melting point between 75° C. and 160° C., having from 10 to 24 carbon atoms to the molecule the batch being maintained at a temperature not below 175° C.

No. 2,373,460, Hand Soap, patented April 10, 1945 by Jeronimo Diaz Compain, Central Senado, Cuba. A hand soap comprising a water-soluble soap and bagasse ashes in proportions ranging from about 1:2 to 2:1; said bagasse ashes being in finely divided form, having an alkali metal oxide content of about 4.4 per cent by weight and being composed of a lighter fraction which separates from a heavier fraction of ash upon burning bagasse in a furnace.

No. 2,373,593, Method and Apparatus for Transforming substantially Non-Forming Retaining Masses Into Solid Cakes or Bars, patented April 10, 1945 by Fred Forrest Pease, Squantum, Mass., assignor to Lever Brothers Co., Cambridge, Mass. A method for preparing soap in cake form which comprises simultaneously cooling heated soap and forming it into a bar of substantially rectangular cross-section having a surface less plastic than its center portion, weakening a side wall of said bar, cutting the bar into sections of predetermined length and cooling said sections, whereby said weakened wall permits a controlled movement of said wall as a result of shrinkage of the bar during cooling.

No. 2,373,646, Apparatus for Saponification and Extraction, patented April 17, 1945 by Donald S. Binnington, St. Paul, assignor to General Mills, Inc., a corporation of Delaware. Apparatus for the saponification of a liquid and for the solvent extraction of the non-saponifiable component thereof which comprises a tank, heat exchange means for said tank, a still disposed separately from said tank, a condenser, a vapor conduit connecting the upper vapor portion of said condenser with the upper vapor portion of said still, a conduit for condensate connecting the lower portion of said condenser with the upper portion of said tank, and a valved conduit connection between the tank and the still, below said vapor conduit connection so arranged as to permit gravity return flow from said tank to said still.

No. 2,374,187, Detergent Composition, patented April 24, 1945 by Lawrence H. Flett, Hamburg, N. Y., assignor to Allied Chemical & Dye Corp., New York. A detergent composition in cake form adapted for toilet purposes and possessing cleansing and sudsing properties similarly to ordinary soap, comprising as its essential components a solid, neutral, water-soluble salt of an alkyl sulfoacetate having an open-chain hydrocarbon group of 12 to 14 carbon atoms, in intimate mixture with a solid, water soluble amido body selected from the group consisting of urea, monobutyl urea, dibutyl urea, phenyl urea, acetyl methyl urea, ethyl carbamate, succinamide, phthalimide, caffeine, dicyandiamide and guanidine carbonate, the amount of the salt of the alkyl sulfoacetate not exceeding one-tenth of the weight of the amido body.

No. 2,374,213, Cleansing Compositions, patented April 24, 1945 by Morris Katzman, Chicago, assignor to The Emulsol Corp., Chicago. A cleansing composition comprising a cation-active surface modifying agent admixed with a carboxylic acid derivative of an aliphatic hydroxy compound, the carboxylic acid radical of which contains at least eight carbon atoms, said derivative containing at least one unesterified hydroxy group, said ingredients being present in proportions bearing a ratio to each other of from about 1 to 10 to about 10 to 1.

No. 2,374,414, Polishing Composition, patented April 24, 1945, by Leonard C. Cartwright, New York, assignor to Foster D. Snell, Inc., Brooklyn. A self-polishing composition base in solid condition, for the production of a wax-in-water emulsion on mixing with hot water, comprising a dispersion of an aqueous soap phase in a wax composition, the water in the soap phase being in the proportion of 10 to 50 parts by weight for 100 parts of the said base, so that the water present is adequate to dissolve the soap at the boiling point of water but insufficient to make the whole base liquid at ordinary temperatures, the soap consisting principally of the soaps of fatty acids containing 13 to 18 carbon atoms to the molecule with an alkali that is non-gaseous at ordinary temperatures, the proportion of

(*Turn to Page 165*)

Chlorinated Kerosene

A study of the physical properties has been made of a kerosene fraction boiling between 348° and 525° F. and having a low aromatic content, and chlorinated to from 5 to 60 per cent chlorine content in steps of approximately 5 per cent. The measurements comprise elementary analysis, refractive index, surface tension, furfural point, kinematic viscosity, solid point, specific gravity, flash and fire points, and molecular weight. These data are correlated with the degree of chlorination and the average molecular compositions.

The furfural miscibility temperature decreases markedly with the degree of chlorination. This is in general agreement with the theory that chlorination improves the solvency characteristics of hydrocarbon material. Flash and fire points increase with the degree of chlorination as expected; above 52 per cent chlorine content, the products are not flammable. No appreciable differentials in viscosities are obtained until the chlorine contents are above 30 per cent. Above 50 per cent chlorine content small increments in chlorine produce large increases in viscosity. The solid point at first decreases to a sharp minimum with increase in chlorine and then rises rapidly for chlorine contents above 35 per cent. Tnis rise is undoubtedly associated with the higher viscosities obtained above 35 per cent chlorine content. A series of 10 graphs show these relationships. R. M. Dean and E. Lieber. *Ind. Eng. Chem.* 37, 181-5 (1945).

Washing Dirty Eggs

A comparison of the germicidal efficiency of a quaternary ammonium compound called "Emulsept," has been made with chlorine for washing dirty eggs. The percentages of microorganisms killed with 0.04 per cent of "Emulsept" for the same series of eggs, was many times greater than the percentages of those killed when 100 p.p.m. of active chlorine was used. The quaternary compound has the advantages of low toxicity and of being nonirritating to the skin. V. J. Pennisten and L. R. Hedrick. Science 101, 362-3 (1945).

Study of Antifouling Paints

A method is described for measuring the rate at which copper toxics dissolve from antifouling paints. Conditions are given under which a significant value for the copper leaching rate will be obtained. The leaching rates of antifouling paints change upon immersion in the sea. It is therefore necessary to determine leaching rates after various times of immersion in order to interpret adequately the antifouling properties of a paint.

Evidence is presented which shows that the copper antifouling paints must leach at the rate of about 10 micrograms of copper per square centimeter per day in order to prevent the attachment and growth of fouling organisms. All paints which have leaching rates consistently below this value become fouled. The leaching-rate test permits quantitative measurement of the toxicity of an antifouling-paint surface and has been useful in the study of new and improved formulations. B. H. Ketchum, J. D. Ferry, A. C. Redfield and A. E. Burns, Jr. *Ind. Eng. Chem.* 37, 456-60 (1945).

Acid Separation in Tall Oil

Tall oil is esterified with an excess of an alcohol such as methanol by refluxing in the presence of a catalyst at atmospheric pressure, or without catalyst under increased pressure. After esterification, the alcohol is removed by distillation. The esterified product is neutralized with a strong alkali solution and sufficient water is added to obtain an approximate resin-acid concentration of 30-40 per cent. This is stirred with benzene which separates as an upper layer, while the mixture to be extracted forms the lower layer. The extraction is continued at 30-45°C. until the solvent leaving the extractor is only slightly colored.

The extracted soap solution is acidified with dilute sulfuric acid, the resin acid-benzene solution charged into a still, and benzene distilled and crude dark-colored resin acids recovered. A practically complete separation of fatty acids from resin acids is obtained by the continuous liquid-liquid solvent extraction. F. H. Gayer and C. E. Fawkes, to Continental Research Corp. U. S. Patent No. 2,348,970-1.

—— • ——

Cation-active Agents

Commercial cation-active agents are derivatives of quaternary ammonium bases. A long-chain hydrocarbon is an essential characteristic, with the substituent groups having a considerable effect on the properties of the compound. For example, octyldimethyl ammonium chloride possesses some surface activity, but replacement of the hydrogen atom by a methyl group increases the activity somewhat, and longer chains such as lauryl, cetyl and benzoyl, enhance the effect even more. The compound cetyl trimethyl ammonium bromide is a well known British product, "CTAB," or "Cetavlon," and the benzoyl derivative is one of the chief constituents of the antiseptic "Zephiran."

This type of compound has a marked inhibitory effect on the metabolic processes of bacteria. Bacterial cells function as semipermeable membranes, and surface-active compounds tend to concentrate at the interfaces. If the compound is toxic, the bacteria will be killed, although the average strength of the solution may be lower than that considered lethal. It is also considered that bacteria may have a base-exchanging action, similar in principle to the zeolites, and that the bacteria may form compounds with the agent in such a way as to interfere with metabolism.

Many of the newer antiseptics today are essentially mixtures of volatile oils with chlorocresol or chloroxylenol derivatives, stabilized by the use of soap. These solutions can be diluted with water down to the critical concentration before becoming cloudy by the reduction of the dispersing power of the soap. By the use of quaternary ammonium compounds such precipitation is largely avoided. The high dispersing power of the cationic compounds may permit other and less soluble phenols to be used. S. J. Hopkins. *Perfumery & Essential Oil Record* 36, 71-5 (1945).

A.O.C.S. Elects R. R. King

Robert R. King, technical director of Interstate Cotton Oil Refining Co., Sherman, Tex., was elected president of the American Oil Chemists' Society succeeding Dr. Klare S. Markley, of the Southern Regional Research Laboratory, New Orleans, it was announced last month, following a meeting of the members of the governing board, in Memphis, May 10-12. Other new officers include: vice-presidents, S. O. Sorensen, technical director of Archer-Daniels-Midland Co., Minneapolis; Reid T. Milner, head of the analytical and physical chemical division of Northern Regional Research Laboratory, Peoria, Ill.; Judson H. Sanders, head of the edible process development group of the chemical division of Procter & Gamble Co., Cincinnati; C. P. Long, head of the analytical methods section of the standards department, chemical division of Procter & Gamble Co., Cincinnati; secretary, H. L. Roschen, research chemist Swift & Co., Chicago, and treasurer, John P. Harris, manager, Chicago office, Industrial Chemical Sales division, West Virginia Pulp & Paper Co. Other members of the governing board for the coming year will be: Dr. Markley; Lamar M. Kishlar, of Ralston Purina Co., St. Louis; H. S. Mitchell, Swift & Co., Chicago; and W. G. McLeod, Oscar Mayer & Co., Madison, Wisc. Retiring members of the board are: John R. Mays, Barrow-Agee Laboratories, Memphis; Foster D. Snell, Foster D. Snell Laboratories, Brooklyn; J. C. P. Helm, of Helm Laboratory, New Orleans, and for 20 years secretary-treasurer of the society; and Dr. H. A. Schuette, University of Wisconsin.

ROBERT R. KING

Soap Rosin Consumption Down

Reported consumption of rosin in soap in the United States was 324,164 (520 lbs.) barrels for the crop year Apr. 1, 1944-Mar. 31, 1945, as compared with 327,058 (520 lbs.) barrels for the 1943-1944 crop year, according to the 1944-45 annual Naval Stores Report just received from the U. S. Department of Agriculture. Consumption for all the industries reporting was greater in the 1944-45 crop year than in the previous crop year. Insecticides and disinfectants were reported to have consumed 6,032 drums in the 1944-45 crop year, as against 5,530 drums in 1943-44. Carryover, production and available supply were all down during the crop year just ended as compared with 1943-44. Reported rosin stocks on Apr. 1, 1944 were 794,786 drums; on Mar. 31, 1945 stocks were reported at 388,266 drums, which made a 406,520 drum decrease. The decrease in stocks at the end of the 1944 crop year was 489,443 drums. Production for the year ended Mar. 31, 1945 amounted to 1,317,912 drums; the 1943-44 production figures were given as 1,462,831. No figures are available for imports due to wartime security measures.

OPA Clarifies Wax Pricing

The OPA recently issued an amendment to Revised Maximum Price Regulation No. 264 designed to curb alleged evasions of purchases of vegetable waxes and beeswax from foreign sellers. Two new sections are added to RMPR 264 by the amendment No. 4. The first specifies a number of evasive practices which the OPA declares to be illegal and for which "importers who indulge in them . . . will be held strictly accountable." The second section states that importers may not pay more for purchases and services in Connection with the purchase of waxes than the established maximum price.

Florida Passes Weights Law

A state weights and measures law which requires any packaged commodity to bear its net weight, measure or numerical count has recently been passed by the Florida State Legislature. The law, Senate Bill 20, provides that reasonable variations or tolerances and exemptions as to small packages shall be established by administrative regulations. Objections to the law are that it does not provide that such regulations shall be uniform with those promulgated under the Federal Food, Drug and Cosmetic Act; second, it requires that the net quantity declaration shall be made on the wholesale in addition to the retail package, whereas the Federal Act applies only to the retail package; and, finally, it empowers the administrative officer, the Commissioner of Agriculture, to fix a standard of fill for any container, by regulation not required to be uniform with any promulgated under the Federal Act.

Hercules Research Fellow Named

The appointment of William LeRoy Parker, of Marshallton, Del., formerly assistant entomologist for Niagara Sprayer & Chemical Co., Middleport, N. Y., as Hercules Research Fellow in the department of entomology at the University of Delaware, was announced by that school recently. A 1941 graduate of the University of Delaware, where he received his B.S. degree in agriculture, Mr. Parker did graduate work in entomology at the University of Illinois. He holds a medical discharge from the U. S. Navy.

Mathieson Advances G. P. Vincent

G. P. Vincent, manager of sales development and technical service for Mathieson Alkali Works, New York, was appointed to the newly created position of technical director, the company announced May 25.

Achenbach Named Johnson V. P.

George W. Achenbach, formerly of R. M. Hollingshead Corp., Camden, N. J., was elected a vice-president of Johnson & Johnson, New Brunswick, N. J., according to a recent announcement.

SANITARY PRODUCTS

Insecticides • Disinfectants • Moth Products
Floor Products • Polishes • Chemical Specialties

HEADQUARTERS

FOR PERFUME ODORS

FOR USE IN

INSECTICIDES
LIQUID SOAPS
PARA BLOCKS
CLEANSERS
POLISHES
SPRAYS

"ODOR PROBLEMS DISAPPEAR— WHEN AROMATIC'S SPECIALISTS ARE NEAR"

AROMATIC PRODUCTS, INC.

15 East 30th Street, New York 16, N. Y. - Factory: Springdale, Conn.

ATLANTA • DALLAS • MEMPHIS • PITTSBURGH • CHICAGO

INSIDE NEWS

JUNE PREPARED BY NATIONAL CAN CORPORATION, NEW YORK, N. Y. 1945

Tin Cans Play Double War Role in Capturing a City

From the shells that open the ground attack on an enemy city . . . through the mines that are brought in for use if needed . . . many active and unusual roles are played by tin containers these days in helping bring about victory.

Because no other container protects like the can, tin containers are widely employed to give super protection to fulfill these objectives as well as many others. Naturally, new designs in cans had to be made, and the following are some of those developed.

57 MM Shell Containers

For packaging 57 MM shells, a special composite handling container was designed with tear strip for easy opening. The can is airtight so that humidity, salt air or dampness cannot affect the shells when in storage or transit.

For Fuse Mines

For ease and convenience, a tear strip, key-opening container with component supports for package mine fuses has been devised. This container is also hermetically sealed to protect its delicate contents.

National Can Corporation is proud to have a share in supplying such tin containers to our armed forces. Manufacture of cans such as these, and many others, has naturally intensified the research and laboratory work at National Can. This widely diversified experience promises in peacetime years to bring forward containers that are better . . . containers of unusual design . . . containers for new products requiring different kinds of protection. Then, the experience we will have accumulated will make easier the job of keeping your good things good longer. 986

Super Glue Shows Superior Strength

A new synthetic adhesive is a super glue which can be applied to metal or wood and has enormous strength. It has been used successfully in place of rivets on airplane fuselages. The adhesive bonds are formed under heat and pressure. 987

Vitamin C Held in Canned Grapefruit Juice

The question of how well canned grapefruit juice holds its vitamin C is an important one to the housewife and to the canner who stores the canned product. Recent tests show that canned unsweetened grapefruit juice stored in 12 canning plants after two months still held 95 per cent of its vitamin C; at the end of four months, 90 per cent; and at the end of six months, 83 per cent. Storage room temperature was 78° F. — as high or higher than the average temperature that could be expected in the average home kitchen or pantry. 988

Saving the Beans

Beans produced in Maine are an important contribution to the wartime food supply. But hampering the harvest are beetles which are the most destructive insects affecting this crop. Mexican bean beetles are renegade members of a beetle family — the ladybird beetles — of which most members are beneficial. The outlaw can be recognized by the arrangement and number of black spots, since the bad beetle has 16 and the good beetle has one less. But counting spots is not the solution to the problem. The technique is to outwit the 16-spot variety by leaving space between the plants, by systematic spraying, by planting late enough to escape early summer infestation, and by destroying weeds, grass and infested vegetation in the vicinity of the bean plantings. Some of the canners have cooperated by supplying the farmers with suitable spraying equipment. 989

Liquefied Gases

A number of liquefied gases have been found after study to be adaptable for use as dispersants in connection with the application of insecticidal aerosols. Methylene chloride seems to be most practical either as a substitute for other liquefied gases in some applications, or as a diluent for them in others. Methylene chloride is practically non-toxic and non-flammable, and is an excellent solvent for insecticidal ingredients. 990

Red Coloration in Fish

Red coloration in some canned mackerel caused some alarm on the Pacific Coast last fall. Careful investigations showed that neither injection nor feeding the large quantities of the red coloring material had any effect on test animals, so that all danger of toxicity was eliminated. The problem of preventing a recurrence of the phenomenon remained.

Chemical tests suggested that the coloring material is identical with astacin, which is responsible for the red color in boiled lobster and is widely distributed among other marine organisms.

The red pigment was present in the intestines of the horse mackerel, but not in those of the Pacific mackerel, even when both were caught in mixed schools. It was impossible to identify the organism responsible.

Since it is known that this problem may arise, inspection can be relied on to prevent mackerel carrying these undesirable crustacean remains from going into the cannery cleaning lines. 991

What'll You Have?

A sealed waterproof bag included with each shipment contains directions for transforming canned vanilla ice cream mix into any one of eight special desserts for overseas troops in areas where organized messes can be set up. Dehydrated fruit juice powders, canned fruits, candies and flavorings all contribute to the variations. Suggested flavors are chocolate, lemon, fruit cocktail, peach, coffee, maple, pineapple and hard candy. All are delicious.

It is noteworthy that improvements in rations are in the hands of personnel who have had experience living on rations, and are checked by taste and preference tests among the men for whom the rations are intended. 992

Keep It Dark

If light rays below 4900 Angstroms are kept from the product, fruit and vegetable juices will remain fresh for long periods, according to an inventor who has recently received a patent.

He claims that the deleterious effect of light rays upon fruit and vegetable juices is practically instantaneous, and that once juice is exposed to ordinary light certain chemical changes are initiated that can not be prevented by any subsequent treatment from causing deterioration.

When juice is extracted in complete darkness or in light containing no waves below the critical value of 4900 Angstroms, the juice will remain fresh. Flash pasteurization and canning, still without exposure to the harmful range, is preferred, but low temperature storage in bulk containers for distribution from retail outlets is also envisioned. 993

Combat Cosmetic Cream

A cosmetic cream, employed by Navy gun crews, and GI's using bazookas and flame throwers to prevent burns, will probably have a postwar use by community fire departments. Applied like a beauty mask, the cream dries quickly and can be removed easily with soap and water. 994

"K" Rations Getting Better

Variety in ration packs continues to improve. The man depending on "K" (pocket) rations now stands a good chance of lunching on fried ham, fried pork, pork and beef, chop suey or solid-pack chicken—all canned, of course. 995

New Insecticide

Information on a safe, economical and effective insecticide has recently been released. Endorsed by many Agricultural Experiment Stations, this new insecticide is reported to be highly successful for destroying thrips, leaf rollers, and other chewing insects infesting vegetables of all kinds, ornamental crops such as roses, gladioli, chrysanthemums, carnations, dahlias, as well as miscellaneous garden flowers where the underground portion of the plant is eaten.

The active ingredients of the insecticide are antimony and phenol. Although poisonous and toxic, it will not affect water soluble chlorophyll and is suitable for outdoor as well as indoor use.

In liquid form, the insecticide is easily handled and dissolves readily without heating. It does not injure plants when used according to directions, and does not discolor foliage. During hot, dry periods it is completely effective and can be stored for long periods without losing effectiveness. 996

Core Sampling Fish Livers

In core sampling fish livers it is important to obtain a sufficient number of cores to be representative of a batch of livers. Experiments run by the Federal Fishery Laboratory indicate, under average conditions, a minimum of 100 cores is required with most species of fish if a precision of 95% or better is desired.

This laboratory has built a drill sampling device and has released the constructional details and instructions for use. The sampler is designed specifically for use with livers in the standard five-gallon can. It has given good results on fresh, unfrozen livers, and will work well with soft-frozen livers. Sampling of hard-frozen livers, however, would require a more powerful motor. 997

Yeast Goes to Russia

Brewer's yeast tablets made palatable by debittering, contain all members of the B vitamin complex, together with a high and readily assimilable protein portion. One of the enthusiastic users is the U. S. Marine Corps. Another is Russia. Millions of 7½ grain tablets have been shipped there in tins containing 1000 tablets each. It is believed that these go to the armed forces. 998

Herbs and Spices for Meat

Twenty to thirty herbs and spices are used in the meat packing industry. These are allspice, anise, bay leaves, cardamon, celery fruit, caraway, celery salt, cinnamon, cloves, coriander, cumin, fennel, ginger, mace nutmeg, marjoram, mustard, oregano, paprika, black pepper, chili peppers, cayenne, white pepper, sage, thyme, turmeric and rosemary. 999

Technical Topics

SIZING MATERIALS—New sizing materials and wood sealers are made by reacting crotonic acid with isobutylamine, according to a recent patent. These resinous materials are soluble only in alcohols and are insoluble in water, acetone, toluene, or mineral spirits. 1000

IMPROVES GLOSS IN PAINT—Benzoic acid, added to paints containing zinc oxide, is said to improve the gloss of the film and facilitate the removal of brushmarks after application. It is thought that the acid acts as a surface-active material, probably by interaction at the surface of the zinc oxide particles to form a surface layer of zinc benzoate. The acid also appears to improve fluidity. 1001

CHROMATED ZINC CHLORIDE PROLONGS FENCE POST LIFE—Chromated zinc chloride can now be used to make nondurable fence posts, such as those made of the lower grades of green pine, relatively lasting. No one knows how long posts treated with this chemical will last, but a southern college reports that a recent examination of sap pine posts, which have been in the ground nearly six years, showed 85% sound. Untreated posts are usually destroyed in two years. 1002

SOAP AS A DISPERSING AGENT—Soap is reported to be employed as a dispersing agent in the manufacture of adhesive compositions from rubber latex. 1003

SOAP FOR INSULATION—Soap is reported to be the main constituent of a paste used in an active insulating composition. The compound consists of a paste and a strong, light-weight and fire-proof mortar body. 1004

STABLE ROTENONE INSECTICIDE—A method of making a stable rotenone insecticide through the use of a clear potash soap with an aqueous solution of potassium pyrophosphate added to form a jelly was recently announced. 1005

TENT AND AWNING PRESERVATIVE—A patent, recently issued, covers a preservative for tents and awnings which utilizes a polychlorophenol in combination with a finely divided solid thermoplastic vinylidene chloride resin. 1006

NEW LECITHIN SOURCE—Cotton seed has been found a source of commercially profitable lecithin. 1007

SOAP FILM PREVENTS CORROSION—A process for putting a soap film on metal to prevent corrosion has recently been granted a patent. 1008

MEXICAN OIL—Seeds of Garcia nutans, a small evergreen in Eastern Mexico, yield from the kernel 55% of an oil equal to and superior in some respects to the finest Asiatic tung oil. 1009

ALGINIC ACID RAYONS—Both soluble and insoluble rayons are reported being made from alginic acid extracted from seaweed. Unusual designs in lace are possible, using the soluble rayon to hold the twist in threads, the rayon dissolving after the weave. 1010

METHACRYLATE RESINS STRENGTHENED—Itaconic acid is expected to be used for strengthening methacrylate type resins as a result of a new process which has been developed whereby the acid will be made from corn sugar. 1011

VERMICULITE—New uses for the vermiculite mineral are being developed as a result of wartime conditions. It is now suggested as a substitute for flaked graphite in lubricants and as a replacer of aluminum stearate in lubricating oils. Another suggestion is to use it as an extender in gold or bronze printing inks. 1012

SYNTHETIC PIGMENT—It has been announced that a new synthetic pigment was developed that is comparable with natural red iron oxide. It is reported to be available to paint and varnish manufacturers. 1013

LUMINESCENCE RETAINED—The blackening and loss of luminescence which commonly occurs in luminescent pigments upon exposure to the atmosphere can be reduced or overcome by incorporating an alkaline wetting agent in the paint. 1014

Every effort will be made to furnish additional information on these articles. Where such information is not obtainable, we will refer inquiries to the original source of the article. Write to National Can Corporation, 110 East 42nd Street, New York City. Please mention the number at end of article—also name of the magazine you saw it in.

THE FUTURE IS . . .

D&O

ESTABLISHED 1798

. . . TOMORROW

facturers will be able to benefit by the [illegible] and by the new products and new techniques which have come to the fore in the last three years and some of which are still decidedly in the developmental stage so far as general civilian use is concerned.

As a matter of fact, the industry may well benefit if this particular blessing comes gradually. So many new materials and new ideas have evolved that at best it is easy to foresee a period of considerable confusion while manufacturers attempt to weigh the relative merits of new products and appliances and sort out the wheat from the chaff. This difficult process is sure to be further complicated by conflicting claims and by the lack of practical experience with the new materials and devices.

As a reliable guide in this coming confusion we can only reiterate our previously expressed opinion that the household insecticide of the future must be effective and that to whatever extent practicable this effectiveness must be obtained with products which are not subject to any reasonable criticism on the part of consumers or officials because of toxicity, irritation, odor, or other undesirable characteristics.

Our own research and development have been directed toward this objective, emphasizing quality rather than cheapness and with successful results. Quite soon, we hope, it should be possible for us to consolidate these results and make them tangible to insecticide manufacturers in the form of materials for their use.

B-M SPECIAL CLEANER

Spicy Odor!!

Not only is B-M SPECIAL CLEANER pleasant to use because of its remarkable effortless cleaning power but it also has a new and different odor—leaves premises with a really clean and refreshing air. A spicy, light fragrance never before achieved with commercial floor cleaning compounds.

B-M SPECIAL CLEANER isn't "just another scrub soap" or a "war-time soap substitute" or an old product under a new name—it is a brand new formulation, super-concentrated and one which you can sell to your customers without any hesitation whatsoever in regard to the job it will do.

What's more, the ingredients used in its manufacture are not at the present time on the critical list and we can deliver this SPECIAL CLEANER in any quantity desired from single 55 gallon drums up to carloads.

We can't say much more about B-M SPECIAL CLEANER—we feel sure that a trial will convince you it is far superior, from any viewpoint, to any other liquid cleaning preparation on the market.

A One Gallon Trial Sample

is Yours for the Asking

BAIRD & McGUIRE, Inc.

ST. LOUIS, MO. Baird's HOLBROOK, MASS.

TRADE REG. MARK

The Military calls it

DDT

The world calls it a

MIRACLE

We call it

SANTOBANE

Monsanto's
Technical Dichloro-diphenyl-trichloroethane

For many months Monsanto has been making Dichloro-diphenyl-trichloroethane for exclusive government use.

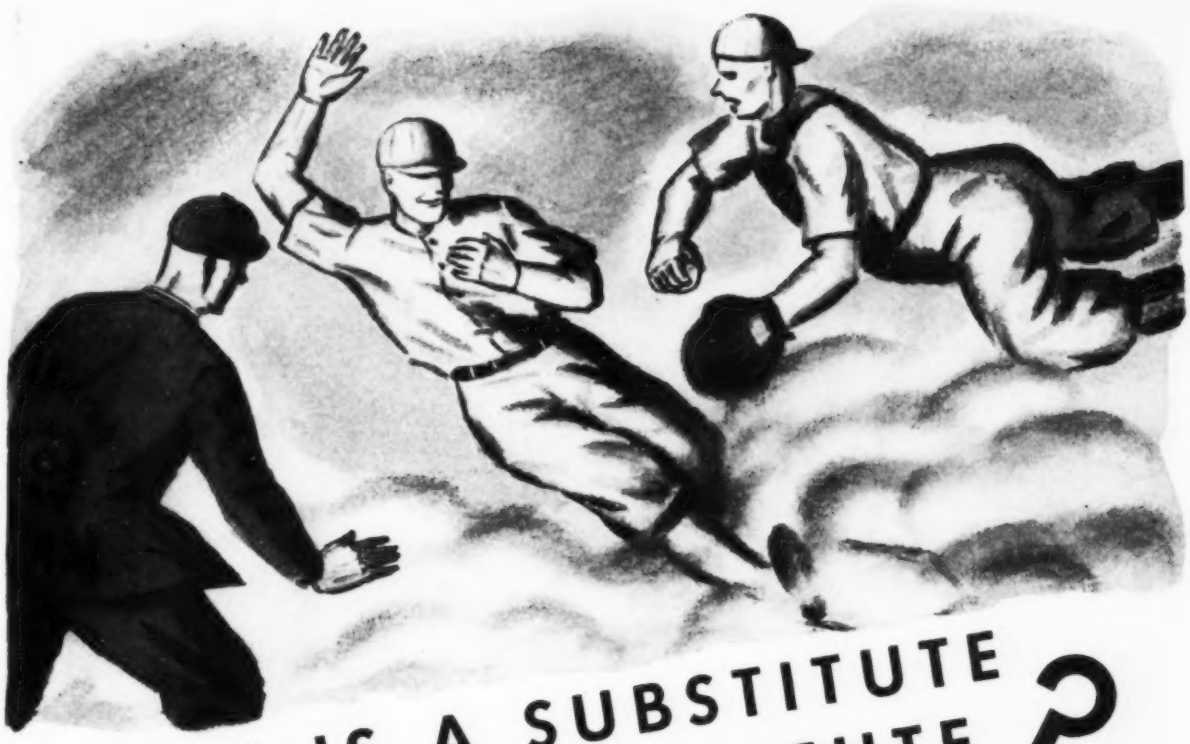
It is one of the great wartime developments . . . its lethal effectiveness against the malarial mosquito and the typhus carrying louse has now made its story legend.

How great the peacetime role of Santobane* may be, nobody now can say. Monsanto believes it will be great, though limited in some fields. More must be learned about its toxicity to man as well as its possible harmful effect to plant life. But Monsanto recognizes too its tremendous potentials in control of disease breeding mosquitoes, lice, houseflies, etc., its possibilities in eradicating pests in agricultural fields.

Santobane is still under allocation by the War Production Board, with only small amounts allotted for agricultural and civilian experimentation. MONSANTO CHEMICAL COMPANY, Organics Division, 1700 South Second Street, St. Louis 4, Missouri. District Offices: New York, Chicago, Boston, Detroit, Charlotte, Birmingham, Los Angeles, San Francisco, Seattle, Montreal, Toronto.

MONSANTO CHEMICALS
SERVING INDUSTRY...WHICH SERVES MANKIND

*Reg. U. S. Pat. Off.



WHEN IS A SUBSTITUTE NOT A SUBSTITUTE?

The Pinch Hitter scores the winning run in a tight ball game! He is greeted with vociferous cheers from the stands. Often the applause is louder and longer than an established star player receives for performing a similar feat. When Pyrethrum became unavailable for civilian use, concentrates which might be used as Pinch Hitters or substitutes were cordially welcomed by insecticide manufacturers.

HI-TOX was one of the concentrates which came into wide use at that time. But HI-TOX is in no sense merely a substitute for Pyrethrum or any other material. In its own right, it has earned an established position as a star performer in the insecticide industry. By reason of its economy and efficiency it is recognized as a standard toxic ingredient in fly and cattle sprays.

Use ***MORTICIDE*** *or* ***SUPER-MORTICIDE*** *for your bed-bug sprays—* ***MORTOLIN*** *for Moth-proofing.*

If you do not know about HI-TOX, consult our office nearest you.

Associated Chemists, Inc.

1906 N. HALSTED STREET
CHICAGO 14, ILLINOIS

EASTERN OFFICE: Velsor Wright Company, 8 West 40th St., New York 18, N. Y.
TEXAS OFFICE: The Carroll Company, 1323 Wall Street, Dallas, Texas

SOLVAY
TRADE MARK REG. U. S. PAT. OFF.

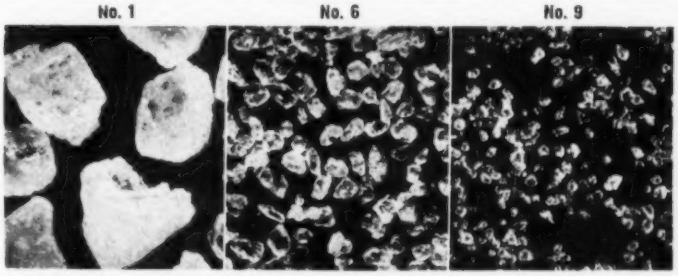
PARA-DICHLOROBENZENE

EFFECTIVE MOTH PROTECTION FOR HEAVY SERVICE UNIFORMS AND BLANKETS

TO PROTECT HEAVY service uniforms and blankets from moth ravage, get this strict MP on the job—SOLVAY PARA-DICHLOROBENZENE. The superiority of these moth protection crystals—as produced by SOLVAY for pressing into blocks and repacking—has been established through years of satisfactory use in the industry.

THE 3 GRADES of SOLVAY PARA-DICHLOROBENZENE now offered are suitable for most normal customer needs. The effectiveness of these crystals has not been changed.

SOLVAY TECHNICAL Service can be extremely helpful in advising you on the best methods of adapting Nos. 1, 6, or 9 to fit your production needs. Your inquiries are invited.



SOLVAY SALES CORPORATION

Alkalies and Chemical Products Manufactured by The Solvay Process Company

40 RECTOR STREET NEW YORK 6, N. Y.

BRANCH SALES OFFICES:

Boston	Cincinnati	New Orleans	Pittsburgh
Charlotte	Cleveland	New York	St. Louis
Chicago	Detroit	Philadelphia	Syracuse

WHAT IT MEANS TO "WIN BY A NOSE"

IN THE picture above, the winner actually nosed out the second horse by —take out your ruler—1/16 of an inch.

Is this good?

In horse racing, yes. But in the postwar race for business, it's something else again.

For, while everyone admits the competition will be tough, the sensible man maintains that it need not be *this* tough.

What's He Doing?

And so, he's planning *now* to be at least half a length ahead, if not more, during those first, hard-riding, postwar years.

He consults American Can Company about *his* future packages.

He realizes that the war itself has produced many new packaging ideas . . . that American Can Company has been in the forefront in solving many of these wartime packaging problems.

And You?

So, the postwar-conscious businessman is working with American Can Company . . . to get his products packaged better . . . more efficiently . . . more economically . . . and more interestingly.

This is how *he* intends to win in the postwar race. How *you* intend to win, too! American Can Company has had more than 43 years of experience in devising better methods of making containers.

We have unparalleled research and marketing know-how. We'll be glad to talk and work with you—without charge.

AMERICAN CAN COMPANY

230 PARK AVENUE CANCO NEW YORK 17, N. Y.

WORLD'S LARGEST MANUFACTURERS OF FIBRE AND METAL CONTAINERS

FAR-REACHING RESULTS FAST

Yarmor 302 Pine Oil assures long-lasting hospital-like cleanliness in the swish of a mop!

Disinfectants made with this fast-working germ-killer are thorough and effective at once—yet inexpensive to use because of the high dilution permitted.

Yarmor 302 may be stored with no loss of strength, and is easily formulated. Non-staining, non-toxic, it has that refreshing piney-fragrance that most customers prefer . . . . keeps them coming back for more! Limited quantities are now available for essential use.

YARMOR* 302 PINE OIL

NAVAL STORES DEPARTMENT

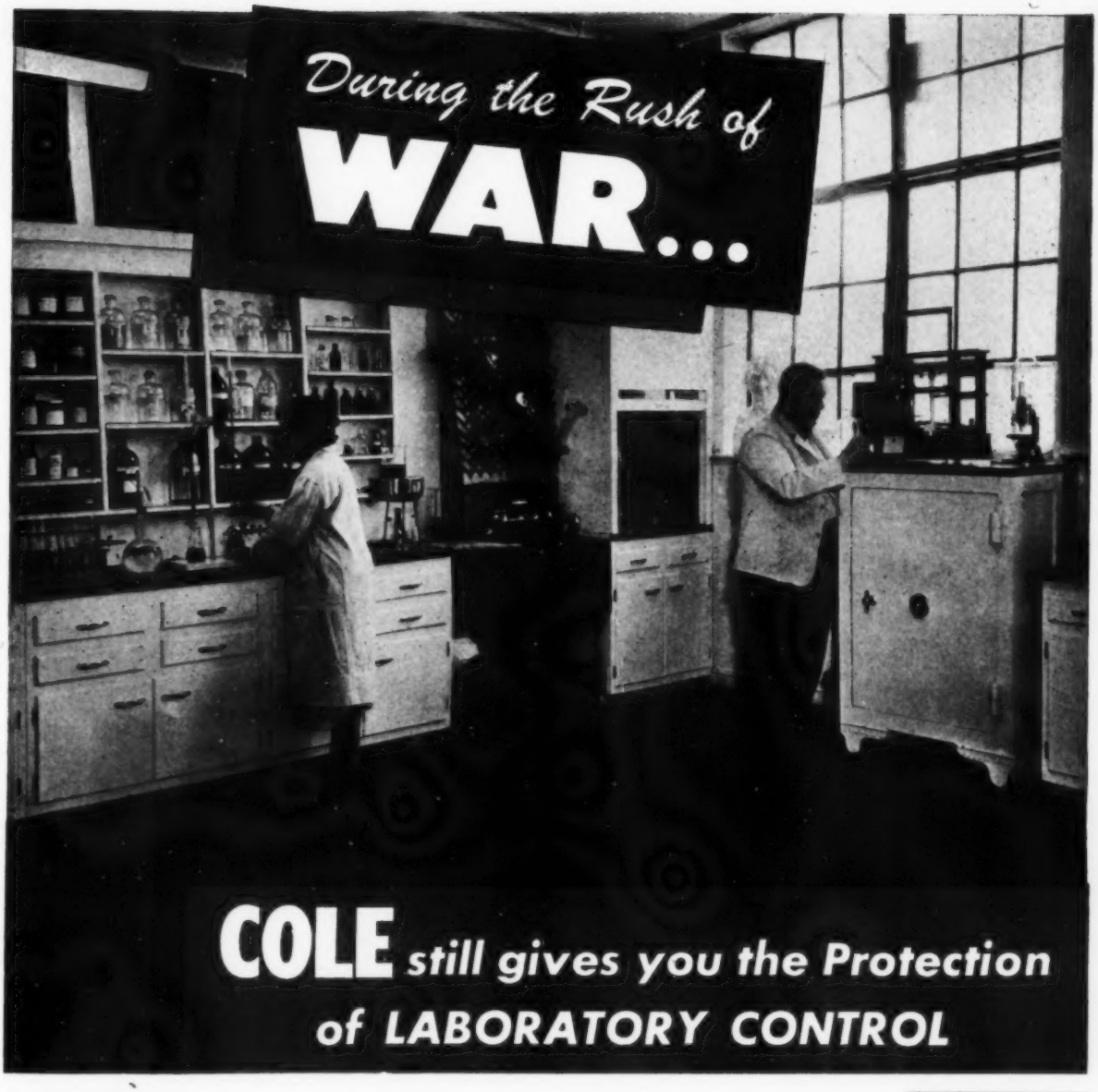
HERCULES POWDER COMPANY

INCORPORATED

961 MARKET STREET · WILMINGTON 99, DELAWARE

*Reg. U. S. Pat. Off. by Hercules Powder Company

NY-56

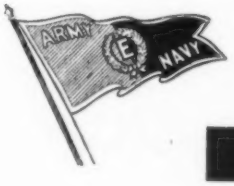


COLE *still gives you the Protection of* **LABORATORY CONTROL**

Cocoanut
Oil
Shampoo

Although our three plants are all busily engaged in filling war orders which must take precedence over civilian requirements—we want our customer-friends to know that we are still in a position to satisfy their civilian needs and supply them with COLE Products in limited quantities. Despite these action-packed days, you can rest assured that COLE Products continue to represent the utmost in quality —because step by step, COLE Products are protected by continuous LABORATORY-CONTROL.

Fire
Extinguisher
Recharges



For prices and literature, write Dept. S.C.

COLE LABORATORIES

23d St. and 37th Ave. • Long Island City, N Y.

HANDBOOK OF PEST CONTROL

The Behavior, Life History and Control
of Household Pests

By ARNOLD MALLIS

THIS new book is a thoroughly practical, complete and up-to-date study of pest control which will be invaluable to every insecticide manufacturer, pest control operator and entomologist. Approximately 570 pages in length, and containing 140 illustrations, it deals in a practical way with the behavior, life history and control of household pests.

While there have been other books in this field, Mr. Mallis' book is by far the most complete and up-to-the-minute practical text on the subject. It reflects insecticide developments as recent as those of the past few months, carrying for instance, the most recent findings on DDT, aerosol insecticides, insect repellents, etc. The emphasis throughout is on control measures, and the author covers fully all the commonly used insecticide materials and treatments. Fumigation is the subject of a special chapter.

An unusually complete list of references to the literature on household pests, insecticides and their use adds considerably to the value of Mr. Mallis' new book. Hundreds of references to the technical literature are listed.

TABLE OF CONTENTS

HANDBOOK OF PEST CONTROL has standard high-grade book binding, cloth and board covers, 6 x 9. Priced at $6.00 per copy. Check *must accompany* order. Orders for books to be sent on approval *cannot be accepted*, but the usual return privilege will be accorded where copies are returned unmarred within 10 days. Owing to present conditions, the first edition must be limited. Accordingly, an *early order* accompanied by check is suggested.

Published By

MAC NAIR-DORLAND CO.

254 West 31st Street New York, N. Y.

MacNair-Dorland Co.

Enclosed is check for $6.00. Send me a copy of the new "Hand Book of Pest Control."

Name .....

Firm .....

Address .....

Bobrick SOAP DISPENSERS

ONE OF THE TRULY GREAT NAMES IN CLEANLINESS

LOOK FOR THIS TRADE MARK

IT IS YOUR GUARANTEE OF THE ULTIMATE IN SOAP DISPENSING EQUIPMENT COMBINING ENGINEERING SKILL, PRECISION WORKMANSHIP AND A THOROUGH KNOWLEDGE OF THE CHEMISTRY OF SOAPS AND HOW TO DISPENSE THEM MECHANICALLY WITH A MINIMUM OF MAINTENANCE

FOR 39 YEARS

Bobrick

MANUFACTURING CORPORATION

2619 SANTA FE AVENUE, LOS ANGELES 11, CALIF.

FOR 39 YEARS the name BOBRICK has been a symbol for quality and dependability in the field of SOAP DISPENSING EQUIPMENT.

FOR 39 YEARS Bobrick has constantly maintained its leadership through continuous research and development.

The BEST Bobrick soap dispenser has never been built because day in and day out Bobrick Engineers are exploring new materials and new manufacturing methods with an unwavering resolve to improve ... to make each product more and more worthy of its proud position of leadership.

The Bobrick trade mark on soap dispensing equipment is your assurance of tops in quality, *backed by an unconditional guarantee of satisfactory performance for one year from date of purchase.*

Over a million -used by millions

New 1945 O.T.I. Available

SUPPLIES of the new 1945 Official Test Insecticide for evaluating insect sprays by the Official Peet-Grady Method are now available from the office of this Association. The new 1945 O.T.I. is official for testing from June 1, 1945 through May 31, 1946. The 1944 O.T.I. is now obsolete and should not be used.

Supplies of 1945 O.T.I. are available at $5.00 per dozen six-ounce bottles to members of this Association. To others, there is a service charge of $1.00 per dozen. Single bottles are $1.00 each. Check with order is required.

National Association of Insecticide & Disinfectant Manufacturers, Inc.

110 East 42nd Street — New York

OFFICERS

President ..... H. A. NELSON, Chemical Supply Co., Cleveland
First Vice-President . N. J. GOTHARD, Sinclair Refining Co., East Chicago, Ind.
Second Vice-President ..... GORDON M. BAIRD, Baird & McGuire, Inc., Holbrook, Mass.
Treasurer ..... JOHN POWELL, John Powell & Co., New York
Secretary ..... H. W. HAMILTON, Koppers Co., White Tar Division, Kearny, N. J.

BOARD OF GOVERNORS

J. L. BRENN . Huntington Laboratories, Huntington, Ind.
JOHN CURLETT ..... McCormick & Co., Baltimore
MELVIN FULD ..... Fuld Bros., Baltimore
JOHN MARCUSE ..... West Disinfecting Co., L. I. City
H. W. MOBURG ..... Rex Research, Inc., Toledo, O.
A. W. MORRISON .... Socony-Vacuum Co., New York
ARTHUR RASMUSSEN .. Furst-McNess Co., Freeport, Ill.
FRIAR THOMPSON ... Hercules Powder Co., Wilmington
R. H. YOUNG ..... Davies-Young Soap Co., Dayton, O.

Cans are break-proof . . . light- and air-proof . . . tops for economy, convenience, sales appeal!

• "As a maker of insecticides, waxes and polishes, I'm vitally concerned with *trouble-free packaging* for my products. Retailers and housewives feel the same way. And experience proves that *cans* are *really* trouble-free!

"You see... cans don't break or split. That makes them easy and safe to pack, store and handle. Also, cans are light and compact... economical to ship.

"Cans protect insecticides from light — so harmful to the toxic principles of pyrethrum and rotenone. And they guard waxes and polishes from fire.

"As for sales appeal, you can't beat cans! Their neat, clean appearance and smart labels make them stand right out on crowded shelves.

"So take my tip...pack chemical specialties in steel-and-tin *cans* when cans become available again!"

WATCH FOR NATIONAL ADS!

More than 31,000,000 printed messages — full-page ads in full color—are appearing this month in 6 big consumer magazines and in Sunday supplements on a nation-wide scale. This powerful ad campaign reminds readers how *cans* help *them*...points out that no other container combines so many advantages.

HERE ARE THE

5 MAJOR REASONS

Why Housewives Prefer Insecticides In Cans!

1. Cans don't break.
2. Cans don't split.
3. No air- or light-deterioration.
4. Cans are so convenient.
5. ...And so economical.

CAN MANUFACTURERS' INSTITUTE, INC., NEW YORK

ORONITE CHEMICALS

THE NAME TO WATCH IN CHEMICALS

Rapid Wetting Time...Quick Penetration...
ORONITE WETTING AGENT HAS BALANCE

Oronite* Wetting Agent is a semi-fluid product, light brown in color, consisting of a controlled combination of petroleum sulfonates selected to give a high degree of both wetting and penetrating power. The wetting properties of this product are unaffected even by hard water and acid solutions. Oronite Wetting Agent is stable in acid solutions at high temperatures. Its excellent wetting-out characteristics make it inherently superior for a great many industrial uses.

TYPICAL TESTS OF ORONITE WETTING AGENT

Content by Weight:		ASTM Color (of 5% solution in distilled water)	1½
Sodium sulfonate (by difference)	67.50%	pH (of 1% solution in distilled water)	7
Water by distillation	32.00	Wetting Time (0.5% solution with cotton duck), seconds	18
Sodium sulphate	0.40		
Water insoluble	0.03		

Write for technical bulletin "Oronite Wetting Agent" which contains comprehensive data and information about the product and its many uses. Laboratory samples will be sent without cost or obligation.

OTHER PRODUCTS *by* ORONITE

Oronite Sodium Sulfonates, derived from petroleum sulfonic acids, are used as emulsifiers, emulsion breakers, anti-rust compounds, fat-splitting agents, metal cleaners; in oil emulsions, insecticides and sprays.

Oronite Naphthenic Acids are available in several grades for use in the manufacture of detergents, greases, water soluble oils and wood preservatives, and as flotation agents.

Oronite Aliphatic Acids have valuable froth control properties in the flotation treatment of many types of ores.

Oronite Polybutenes are relatively high molecular weight co-polymers of straight and branched chain olefinic pure hydrocarbons. They serve many special manufacturing and industrial purposes.

*REG. U. S. PAT. OFF. 1034

ORONITE CHEMICAL COMPANY

Russ Building, San Francisco 4, California
White-Henry-Stewart Bldg., Seattle 1, Wash.
30 Rockefeller Plaza, New York 20, New York
Standard Oil Bldg., Los Angeles 15, California

KOPPERS OFFERS

Tar acid oils

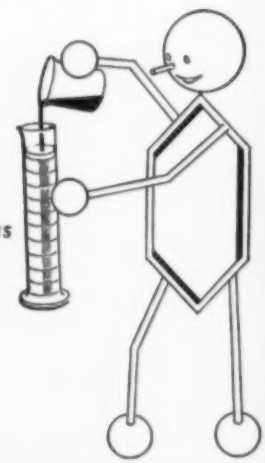
KOPPERS TAR ACID OILS are entirely of coal tar origin with tar acid content as specified to give, when properly compounded, guaranteed phenol coefficients on the basis of 1 unit of coefficient for each 5% of tar acid content in the tar acid oils.

These oils show no deposit of naphthalene at 0°C. and when finished disinfectant prepared from them is diluted with water, a white emulsion is assured.

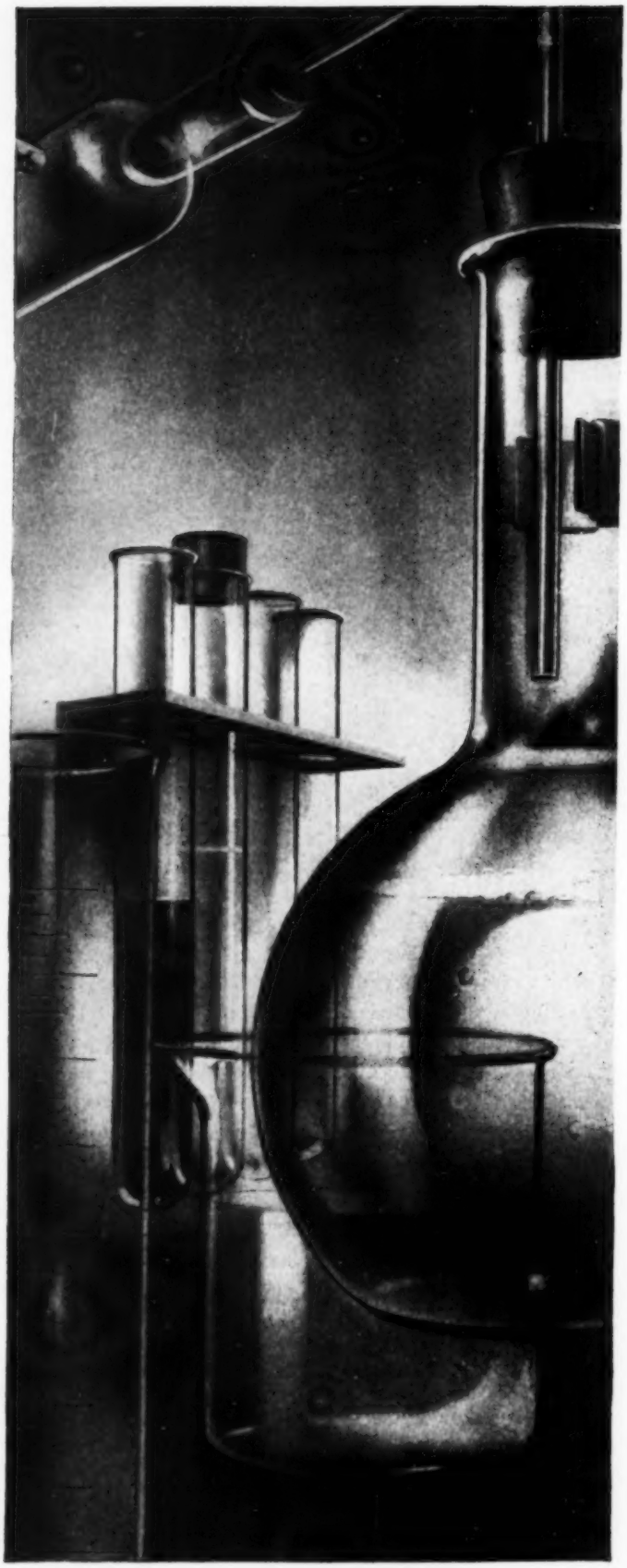
Sulfonation residue is guaranteed not to exceed 5% and averages far below this amount.

Tar acid content is controlled by blending acid with neutral oil and consists entirely of xylenols and acids boiling above the xylenol range.

Samples gladly furnished upon request. Shipments subject to Allocation Order M-27.



NO FLOAT
MILKY WHITE EMULSIONS
NO SEDIMENT



KOPPERS COMPANY, INC.
Tar and Chemical Division
Pittsburgh 19, Pa.

He knows the importance of CENTRALIZED RESPONSIBILITY

GREAT symphony music is possible because responsibility for interpretation and coordination is centralized in one man, the conductor. Smoother production, better protection for your product quality are possible when responsibility for your complete package is centralized with one reliable firm.

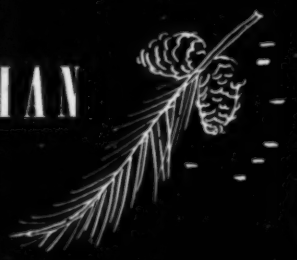
Anchor Hocking offers you a trouble-free source for the perfect combination—Anchorglass containers and matching, custom-fit Anchor Closures.

Try Anchor Hocking coordinated supply and service—to save time, money and misunderstanding—to make sure of containers with accurate capacity and finish—with extra strength to resist production line and transportation knocks—and caps that go on easily, seal perfectly, and keep your product in top condition.

"Meet Corliss Archer" every Thursday Evening, entire Coast-to-Coast Network, CBS.

Reproduced in the MM&R Laboratories

OIL PINE NEEDLE SIBERIAN REPLACEMENT MM&R



Testing Sample and Schedule of Attractive Prices on Request

MAGNUS, MABEE & REYNARD, INC.

SINCE 1895 ... ONE OF THE WORLD'S GREATEST SUPPLIERS OF ESSENTIAL OILS

16 DESBROSSES STREET, NEW YORK CITY • 221 NORTH LA SALLE STREET, CHICAGO

San Francisco: Braun-Knecht-Heimann Co. • Los Angeles: Braun Corp. • Seattle, Portland, Spokane: Van Waters & Rogers, Inc. • Canada: Richardson Agencies, Ltd., Toronto

TOPS for general cleaning

THE CLEANER DOES THE WORK

The amazing thing about FRANKLIN'S RUBBER GLOSS CLEANER is the way it *cleans by saturation.* There's no need for hard scrubbing—*the cleaner itself does the work.*

IT'S CONCENTRATED—*makes 3 to 29 times its own volume*

Simply add FRANKLIN'S RUBBER GLOSS CLEANER to water for cleaning strength required and flood area to be cleaned. In five minutes the old wax and dirt on the floor will be in *solution,* ready to mop off. With this cleaner, you save labor, time, money and at the same time *increase the life of the floor.*

If you use it without wax, you'll find that FRANKLIN'S RUBBER GLOSS CLEANER also makes the floor *safer* because it is an anti-slip floor treatment and is so listed by the Underwriters' Laboratories, Inc.

FOR USE ON ALL SURFACES

FOR CLEANING WALLS AND FIXTURES—use FRANKLIN'S WALL CLEANER. It uses the same cleaning principle as our Rubber Gloss Cleaner but is especially prepared for walls, fixtures, trim, etc. Concentrated—1 gal. makes 30.

FRANKLIN RESEARCH CO.

5134 LANCASTER AVENUE • PHILADELPHIA 31, PA.

A full line of maintenance materials

SANITARY PRODUCTS

A SECTION OF SOAP

Official Publication National Association of Insecticide & Disinfectant Manufacturers

WITH pyrethrum stocks growing apace in this country, with supplies for military needs apparently quite adequate, the material is now being stockpiled by the government. That pyrethrum importers were inclined to be a trifle jittery over the heavy stocks being built up at high prices, probably accounts for the fact that the stockpiled material is now for government account. In other words, Uncle Sam is holding the bag in case of a sudden cessation of hostilities. Liberalizing of WPB policy in permitting civilian uses of pyrethrum has not kept pace with the increase in stocks. The industry feels that further stocks could be freed for civilian uses now with a view to the removal of all restrictions at the earliest possible moment.

WIDESPREAD sampling of DDT by manufacturers direct to ultimate users has brought a number of protests by insecticide manufacturers. The latter state that samples of straight DDT are being sent broadcast to institutions, hotels, hospitals, golf clubs, park and cemetery superintendents, and the like, that these are sent without a request from the receiver, and that no instructions for use or explanation of necessary precautions are included with the samples. Furthermore, it is maintained, samples at present are supposedly restricted by WPB to research and investigational purposes, and few if any of these users have suitable facilities for such research.

The National Association of Insecticide & Disinfectant Manufacturers in response to requests from the industry has brought this matter to the attention of all DDT manufacturers and to WPB. In addition to possible health hazards involved by the promiscuous and careless use of the product, NAIDM has pointed out that mishaps of one sort or another which may result from incorrect application of DDT represent a threat to the future of this important material. NAIDM states that it is anxious that nothing be done now which might give DDT a black-eye and interfere with the anticipated widely expanded use after the war. Orderly marketing of DDT through insecticide industry channels should be the objective of every thoughtful producer.

MENTION of roaches or bedbugs in radio advertising continues to be banned by leading broadcasting units. Quite evidently, the very thought of a roach or bedbug is not considered fit for those sensitive souls who go to make up the "great unseen audience." Gory murders by the dozen are enacted daily for the benefit of these same sensitive souls,—the drip of blood, the gasping groans of dying men, and verbal tripe literally by the mile! But a mention of bedbugs? Roaches? Perish the thought of thus polluting the purity of the air waves!

If the technical progress of radio over recent years were on a level with the thinking of program planners and censors, crystal sets would still be in vogue. The prudery in banning mention of two common insects smacks of something out of the Victorian age. That it should continue year after year is evidence that the same narrow minds are still dictating a radio policy characteristically juvenile.

HENRY A. NELSON

The President Reports to NAIDM...

Summary of a report before the Board of Governors, June 6, 1945

By Henry A. Nelson

President, Natl. Assn. of Insecticide & Disinfectant Mfrs.

FOR the first time in thirty years, no mid-year meeting of the National Association of Insecticide & Disinfectant Manufacturers will be held in 1945. In compliance with the request of the Office of Defense Transportation, the NAIDM Board of Governors voted unanimously some months ago to cancel the meeting scheduled for this month in St. Louis. That mid-year meetings of NAIDM in the past have been advisable, few will gainsay. Large attendances and wide interest have spoken for themselves. Whether there will be a meeting of NAIDM in December remains to be seen, depending upon the progress of the war and in turn the decision of the ODT as to whether or not trade meetings can be resumed.

Problems which face the entire disinfectant, insecticide and sanitary products industry remain many and varied. But since no general meeting of the NAIDM membership and others of the industry can be held at this time for an open discussion of these problems, a meeting of the Board of Governors with committee chairmen was held on June 6 and 7 in New York as a substitute to the extent that a group of 20 persons can act as a substitute for 400.

In addition to numerous current problems, a long-range program of activities designed to be undertaken over a period of the next five or ten years involving the work of most important committees of the Association was presented and discussed. A fuller report on the proposals involved will be presented at a later date. Just as any enterprise must plan ahead, it is essential that NAIDM develop a well-thought-out program for the post-war years to come that the progress of the past thirty years will remain uninterrupted. Arrangements to send a summary of the proceedings of the meeting in New York to all NAIDM members have been made.

Although the Allied victory in Europe represents only half of the victory in this war, it is bound to bring changes and new problems for our industry. While the next few months will undoubtedly be a period of considerable confusion as the western world adapts itself to the new conditions, already a general trend toward greater economy can be noted. Industrial production for war has in some areas already fallen off and will probably fall off further. With this will also go a falling off in demand for some of the products manufactured by our industry. However, measured by any standard other than that of great war-time industrial activity, the demand for sanitary chemical products will remain high for some time to come. That is also likely to hold true for general employment. The level of profits also will show somewhat of a decline, but will continue to remain relatively high. There is not going to be any precipitous decline in industrial activity as a whole. There will probably be a gradual decline to a plane slightly below that of the past two years.

Congressional and Treasury experts estimate that spending for the one-front war will run at an average rate of 71 billion dollars per year, compared with a war-time peak of around 90 million dollars—and this will continue, it is said, until the Japanese war ends. As the Army sees the picture, industry's monthly production for war a year from now will be about three and a half billion compared with the peak level of slightly more than five billion dollars.

At this time it is difficult to venture any prediction regarding the controls exercised by the WPB. Undoubtedly some limitation orders will be revoked and others revised. Yet it would be dangerous to assume that all raw materials will become plentiful overnight. Much will depend upon the military requirements, as witnessed by

the recent new order limiting the use of triethanalomine. As in the past, however, the NAIDM office will keep its members fully advised of any change in WPB orders.

During the six months since the last meeting of NAIDM, the Association has been extremely active in keeping its membership abreast of changing conditions. Officers and committee members have been constantly in touch with Washington developments and have worked closely with WPB and other Government officials where matters affecting our industry have arisen. The membership has been fully advised promptly of all changes or issuance of new orders or regulations by WPB, OPA, WFA or other bureau.

It might be pointed out here that these activities of committee members and Association officers have been numerous and time-consuming, and that they have been in behalf of not only the Association membership, but of every company and firm in the industry. Likewise, they have aided in keeping government officials well posted on conditions within the industry, on the needs of the industry, and have thus facilitated the supply of our products to the armed forces and to the thousands of plants producing war goods throughout the country, not to mention the vitally necessary needs of the civilian population.

Although most Association committees have been very active thus far this year, special mention should be made of the extensive work now being carried on by both our Insecticide Scientific Committee and the Disinfectant Scientific Committee. A heavier burden has fallen upon these two committees perhaps than others. This has required much time and effort on the part of the members. The results of their work accrue to the benefit of the industry at large and accordingly they deserve the gratitude of the industry. To the Legislative Committee of the Association, the same expression of gratitude is due. With over 40 state legislatures in session this year, their job has likewise been one of unusual activity.

Membership in NAIDM today stands at an all-time high. Although this is perhaps in common with many other business and trade associations, it does reflect the acceptance of the leadership of NAIDM in the various branches of sanitary chemical products manufacture and distribution. A great majority of the leading manufacturers and distributors of disinfectants, household insecticides, and allied sanitation products are today members of NAIDM. This is true not only in the United States, but among the leaders in Canada as well. The Association is proud of its 30-year record, and especially of its close cooperation with the Department of Agriculture for many years, and its part in the war effort during the past four years. When our next general NAIDM meeting will be held, we do not know. All will hinge on the war. But whether NAIDM meets this year or next or the year after, the membership and the industry as a whole can rest assured that their interests are being guarded just as closely as they ever were.

NAIDM Year Reviewed

By H. W. Hamilton

White Tar Division, Koppers Co.

Report of the Secretary on the work of the Association since December, 1944

SINCE the last annual meeting of the National Association of Insecticide & Disinfectant Manufacturers in December, 1944, executive office and committee activities have probably been greater than in any previous period in the history of the Association. Not only in matters pertaining to the supply of disinfectants and insecticides for war purposes, in relations with WPB, OPA, the Department of Agriculture, the armed forces, the U. S. Public Health Service and other government departments, but in state and local legislative matters, NAIDM has been actively engaged in behalf of its membership and the industry.

Legislative matters have been the subject of more than average interest during the past months. Bulletins have been issued on pertinent insecticide, disinfectant, and kindred regulations and laws. We have cooperated with other Associations, and have furnished the NAIDM Legislative Committee with details of the status of new and proposed legislation in the various states. Forty-four state legislatures were in session this year, and hundreds of bills were introduced including many so-called pharmacy laws. In the latter, through protest some

H. W. HAMILTON

laws were not enacted and in others sections were inserted by amendment to exempt our products. The legislative work that must be done by this office and the NAIDM Legislative Committee, particularly during years such as this one, takes effort and quick action at all times.

NAIDM has continued to send its members full copies of orders issued by the War Production Board, or other Federal Agencies, which directly affect the general products of our members. I believe this service has been almost exclusive with this Association. These orders have been sent out in most cases within two or three days after they were issued. Pertinent facts from other related orders and regulations have been brought out in regular bulletins. For the first time, we have this year sent two copies to each member of reprints of each published paper read before meetings of NAIDM. Numerous requests have been received for extra copies of all them.

Coordinating the work of the committees and subcommittees continues to be an important function of the NAIDM office. The mandates and wishes of the Association members are brought to the attention of committees. Committee chairmen are always cooperative and by working through a central office it has been possible to adhere strictly to the policies and directions of the membership and the Board of Governors. NAIDM committees are doing a real constructive job. Their reports warrant careful reading.

The committee for the preparation of the Official Test Insecticide annually has an exacting task. This year there has also been the problem of the preparation of an experimental test insecticide for the Insecticide Scientific Committee in connection with the proposed revision of the Peet-Grady Method. As a new fiscal year for the 1945 O.T.I. begins, it is apparent that the use of the OTI is constantly increasing. The amount of 1944 O.T.I. left over on May 31 last was the smallest ever.

So far we have issued 65 bulletins, many of them several pages in length, covering matters of interest to the members; we have distributed reprints of cooperative advertisements, reprints of papers read before our meetings, and many federal orders and their amendments. I believe it is well to remember that the selection of any material to be sent out by the Association is not to be taken in any way by the members as a recommendation, promotion, or comment on any product. The distribution of bulletins, or regulations of Federal, State and Municipal governments regardless of the departments issuing them or the material involved, is a function of an Association.

A matter which should be clarified is the fact that this Association, or its officers as such cannot take action against the product, label, literature or advertising of any member of the industry, whether or not a member of the National Association of Insecticide and Disinfectant Manufacturers, Inc.

Sometimes a little incident indicates that our job is being done well enough for others to notice. Recently, several groups have indicated an interest in the manner in which the affairs of the NAIDM are conducted. We take our share of this honor along with the rest of the membership.

Soon, we hope, there will be world peace. The final transition to peace-time commerce will see a consolidation of war-time progress in the arts and sciences. It appears to be an established fact that war invariably provides tremendous advances in research and scientific developments of all kinds. That these advances must occur at such a great cost in human misery is regrettable. Our industry will be no exception to the changes and advances in raw materials, products, packaging and merchandising. This will lead to new problems, new standards of measure,—a whole new life. Some problems will be individual but many will involve the industry as a whole. The National Association of Insecticide and Disinfectant Manufacturers, Inc. remains the forum for the common problems of its members and the industry and will do its utmost to help establish successful programs for the forthcoming competitive years.

INSECTICIDE TESTING

By Frank C. Nelson
Stanco, Incorporated

Report on fly breeding, new AA Grade OTI, roach testing, sprayers by NAIDM Insecticide Scientific Committee*

CHANGES in fly breeding procedure for flies to be used in Peet-Grady Testing of insect sprays which were discussed by the Insecticide Scientific Committee of NAIDM last December have been carried out by a sub-committee under the supervision of A. H. Goddin. Arrangements have been made and most laboratories breeding flies have obtained a new standard breeding medium from Purina Mills of St. Louis. This new breeding material will be used by all laboratories cooperating in the work of the Scientific Committee and results will be reported back.

A number of other minor revisions in fly breeding technique were introduced and the report submitted

to the Board of Governors for consideration and inclusion in the Peet-Grady instructions for 1945. The Board, however, decided that it would be necessary to obtain a vote of the association membership before any changes could be adopted. The official instructions which go out with the 1945 Official Test Insecticide are, therefore, exactly the same as last year.

A complete tentative revision in OTI directions has been made by the sub-committee and includes a new OTI equal to AA Grade strength (160 milligrams of pyrethrins per 100 cc.) and a new method of rating tested insect sprays. These instructions are to be given only to laboratories cooperating in the study with the AA Grade OTI. After the results of the study have been gathered by the sub-committee, they will be turned over to the Board for consideration next year. Twenty-three laboratories are collaborating in this work.

The new strain of flies that has been bred by Mr. Rebstock at Brunswick, Ga., have been shipped out to all of the laboratories desiring this new strain. Practically everyone will now have a new stock of flies with which to carry on until it seems to be necessary to again mix and breed a new strain. This should eliminate any possibility of variation in resistance between laboratories, at least insofar as the strain of flies is concerned. These two projects have taken up most of the committee's time, but probably other information will be forthcoming at the committee meeting on June 5th. Further studies looking toward the elimination of many variables in the Peet-Grady procedure will be set up at the coming meeting in June.

One of the most serious considerations will have to be the proper procedure for running Peet-Grady tests on spray materials containing DDT or any other similar product having residual action. As discussed at the last meeting, it is practically impossible to remove DDT residues from the Peet-Grady chamber walls and new tests carried out under these conditions are apt to be very misleading. A number of individual laboratories are working on different methods of testing for such products and it will certainly be necessary that the committee make a serious study of substitute methods as soon as they are available. These studies will have to include not only the Peet-Grady room itself but will also have to work out ways and means of cleaning out the recovery cages and preventing contamination of all laboratory equipment.

One of the suggestions that has been made by Mr. Gothard of Sinclair is that all the laboratories should have new sprayers. The DeVilbiss Company was approached to see if a better price could be obtained if a number of sprayers were bought. He reports that they will not consider reducing their prices at present and because of the expense, it is doubtful if everyone would want to order new sprayers. In order to eliminate any possible variation in results due to the sprayers, it has been suggested that the sprayers be checked very thoroughly for delivery time and if the sprayers are not functioning properly, they should be sent back to the DeVilbiss Company for overhauling. They have done this for some of the members and will, no doubt, be in a position to do it for anyone else. If there are a number of laboratories that desire new sprayers, better service would probably be obtained if these orders could all be given to the association chairman so that they all could be ordered at one time.

The work on roach testing under the direction of Dr. Frank Hazard of Wilmington, Ohio, goes steadily on, especially the work on powder testing. A number of the laboratories have set up the liquid spray testing method and are carrying on work with it to determine just how practical the method is and whether the results are reproducible. One or two of the laboratories have reported that they seem to be obtaining reasonably satisfactory results, but that there is considerable variation between batches in the roach cultures. It looks very much like roaches must be bred under controlled conditions if completely satisfactory tests are to be obtained. A summary of Dr. Hazard's work during the past six months is included at the end of this report.

The Sprayer Committee has been rather inactive as a committee because of the difficulty of transportation and lack of time to spend on new major development work. Some of the companies included are carrying on development work looking toward the improvement of both hand and electric sprayers. Everyone on the committee is doing everything that can be done at this time to get better sprayers. Because of the shortage of both materials and manpower, it is practically impossible to expect any major changes until the war is over. One or two of the companies have started work on the measurement of particle size in an effort to determine just what type of construction is best to obtain better spray particles. The shortage of small motors and materials in general have made it practically impossible to do any serious development work on new electric sprayers. This committee will meet in New York on June 5th along with the General Committee to set up plans for the next six months.

The work on methods of testing for moth-proofing materials has been considerably delayed, again due to lack of time. New pieces of material were supposted to have been made up and sent out along with a new visualometer developed by Mr. Fletcher. So far, these samples have not been sent around to the committee for study, at least not in our association. It is believed that Mr. Wildee of Merck & Co. has sent out some of these samples to his committee. A meeting was held this past winter with members of the A.S.T.M. and the A.A.T.C.C. A number of procedures were discussed with them and they have agreed to work toward clarification of these procedures which will make them more applicable to moth testing work. In

* Besides Mr. Nelson, chairman, other members of the committee include A. E. Badertscher, McCormick & Co., vice-chairman; C. R. Cleveland, Standard Oil Co., Indiana, vice-chairman; F. W. Fletcher, Dow Chemical Co., vice-chairman; G. A. Bowden, Boyle-Midway, Inc.; H. C. Donohue, Wm. Peterman, Inc.; Victor Froelicher, Geigy & Co.; A. H. Goddin, Du Pont Experiment Station; A. G. Grady, Sinclair Refining Co.; P. D. Harwood, Dr. Hess & Clark, Inc.; A. C. Miller, Gulf Oil Corp.; D. F. Murphy, Rohm & Haas Co.; C. E. Smith, Socony-Vacuum Oil Co.; Friar Thompson, Jr., Hercules Powder Co.; Alfred Weed, John Powell & Co.; E. R. McGovern, U. S. Dept. of Agriculture; Frank O. Hazard, Wilmington College; C. J. Weinmann, and B. G. Berger, Illinois State Natl. History Survey.

general, these two associations are in agreement with our committee on the methods as they now stand. There are still certain features of the tests that have to be worked out, particularly procedures for carpeting and similar materials. It will probably also be necessary for this committee to continue its studies on other insects that are pests of stored materials. Such studies have already been going on in some of the state colleges and the recent article in *Soap and Sanitary Chemicals*, "Insect Repellency Testing" by Sweetman, Warner & Hershberg, is the type of thing that will have to be considered.

The Cattle Spray Committee has been inactive as far as carrying on any actual testing work is concerned. However, Mr. Cleveland is keeping the literature on this subject up to date and eventually some work will have to be instituted either by this committee or probably by the association, to work out some methods of testing cattle sprays both for toxicity and repellency. These studies will, no doubt, be complicated by the present development of materials having long-term residual action.

Liquid and Powder Methods for Roach Testing

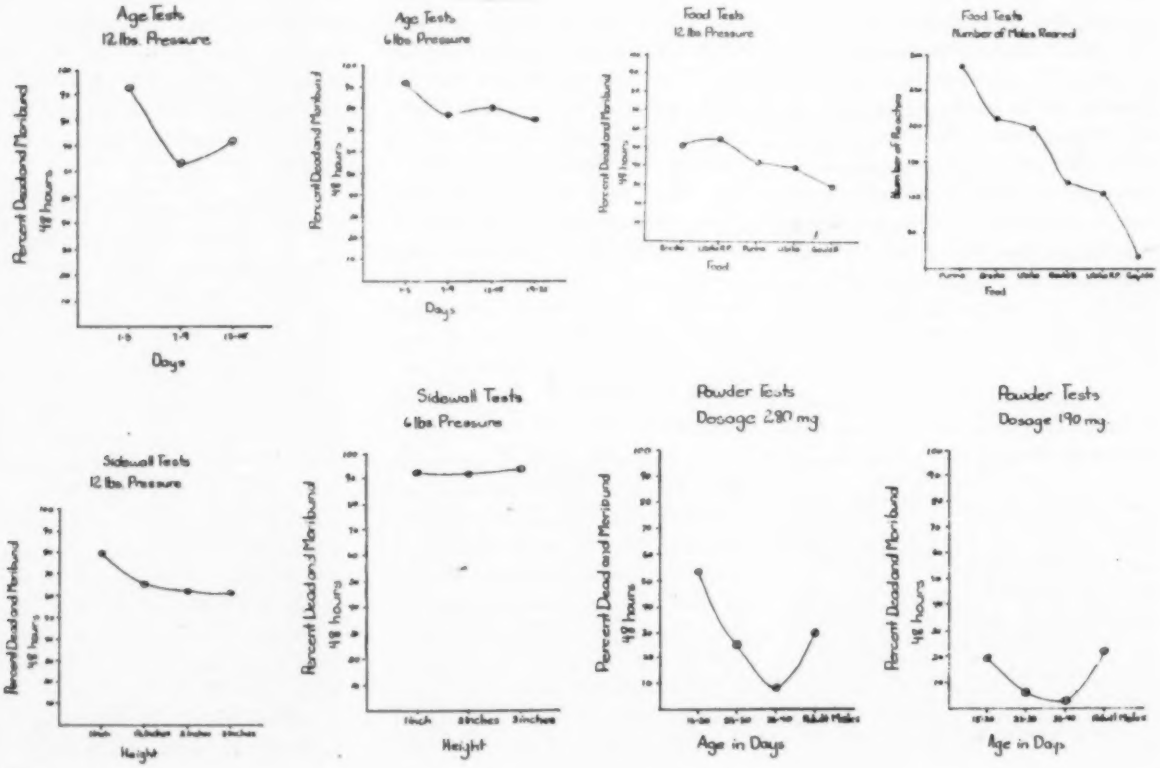
By Frank O. Hazard
Wilmington College

THE investigation on the roach liquid method has progressed during the past five months along three lines, namely, (1) the age of adult male roaches in relation to susceptibility; (2) the food of roaches in relation to susceptibility and (3) the height of container side-wall in relation to per cent kill. The results are as follows:

(1) Tests with adult male roaches using the age groups, 1-3 days, 7-9 days, 13-15 days, 19-21 days definitely showed 1-3 day old roaches to be most susceptible to O.T.I. with insignificant differences for this factor existing among the other age groups.

(2) Results from feeding various types of food show Purina Dog Checkers to produce an average degree of resistance. The data also indicate that this type of food reared many more test insects than the others.

(3) Tests to determine the side-wall height were conducted against 4th instar nymphs of the German Roach. The findings show that a side-wall height of 1 inch produces the highest per cent kill; however, this container was found impracticable as it permitted the escape of the roaches. Containers having side-wall heights of 1½ inches, 2 inches, and 3 inches



were tested with insignificant differences in per cent kill obtained. The escape of roaches from the 1½ inch containers was frequent; for the 2 inch containers, occasional; and for the 3 inch ones, not at all. An examination of the data indicates that containers having a 3 inch side-wall height should be used.

Preliminary tests under paragraphs one and two were conducted at a pressure of 6 pounds, but to determine if comparable results might be obtained at a lower level of the mortality curve, additional tests were conducted at 12 pounds pressure. Comparable results were obtained.

Tests with the powder method have been conducted chiefly to determine if the current procedure will produce results which can be duplicated. Four age groups of the German Roach have been studied, namely, 15-20 days, 25-30 days, 35-40 days, and adult males. The data show a marked increase in the resistence for nymphs from 15-20 days up to 35-40 days. On the other hand the per cent kill for adult males is comparable to that of 15-30 days old nymphs. The findings definitely reveal that results can be duplicated by this method. Studies of adult males disclose that the physiological condition of the individual is largely responsible for variation in per cent kill obtained. The physiological factor appears to be conspiciously important in results from age tests which are just beginning.

Diagrams of the assembly for the roach powder method already have been submitted to members of the Scientific Committee, however, graphs which will serve to summarize the data accompany this report.

LEGISLATION IN 1945

By W. J. Zick
Stanco, Incorporated

Summary of state and federal legislative activity affecting insecticides and disinfectants reported by NAIDM Legislative Committee*

DURING 1945, forty-four state legislatures have been in session. Of the hundreds of bills introduced which might have affected insecticides and disinfectants, many of which were so-called pharmacy laws, — in which proper exemptions were offered and adopted as far as insecticides and disinfectants are concerned,—the following have become law up to May 17, 1945:

ARIZONA Senate Bill No. 96. This gives the state of Arizona an Economic poisons law covering agricultural products; includes garden and animal sprays but exempts household insecticides, disinfectants and deodorants. Requires registration Jan. 1 each year; fee $25 for first economic poison registered and an annual fee of $10 for each additional economic poison registered in any calendar year. Effective July 1, 1945.

CALIFORNIA Assembly Bill 294. Amends Section 1071 to the Agricultural Code relating to licenses, fees, and registration of economic poisons. This does not affect the present law—is a clarification and the requirements and registration fees remain the same.

KANSAS House Bill 64. An act for the distinctive coloring of white powder poisonous insecticides to identify them from food products. Became law March 29, 1945, to become effective and be in force from and after its publication in the statute book.

MINNESOTA Senate Bill 826. This is a new Law. Minnesota had an insecticide and fungicide law which covered agricultural products and did not require registration. The new law covers all economic poisons, including household products, and requires registration annually and before selling or offering for sale any economic poison used as an insecticide or fungicide within the State of Minnesota. The fee is $5 for each product or $25 if more than four products are registered by one registrant. Registration to be made on July 1st of each year. The law becomes effective July 1, 1945.

* * *

The following bills introduced were actively opposed and were not enacted:

NEBRASKA LB No. 150. This was entitled "Deadly Fumigants" but covered a multitude of things, including our products. Protests succeeded in having it indefinitely postponed.

NO. DAKOTA House Bill No. 89, covered economic poisons, registration, formula disclosure on labels, advertising control. This bill died in committee.

Two bills which were of interest to all manufacturers in the industry were: WASHINGTON HOUSE BILL No. 332 which would have increased registration fees to $50 for the first economic poison and $5 for each additional item. This bill died in committee.

OREGON Senate 238, a complete revision of the existing Oregon Insecticide and Fungicide Law. As advised in our bulletins, this proposed revision was the concern of the entire industry and an advisory committee of industry worked with the Department

* In addition to Mr. Zick, members of the NAIDM Legislative Committee include C. L. Fardwell of McCormick & Co. and all members of the Board of Governors.

Two Time-Tested Insecticidal Agents

FOR HOUSEHOLD, LIVESTOCK AND INDUSTRIAL SPRAYS

LETHANE 384 ★ LETHANE 384 SPECIAL

• Leaders for more than fifteen years, the LETHANES are today the most widely used insecticidal agents in household, industrial and livestock sprays. The reason lies in their unique combination of desirable properties. They excel in speed of action and uniformity. Other features that distinguish the LETHANES are high killing power, stability, safety, mild odor and low irritation.

For additional data on these products, write or call our nearest office — Philadelphia, Chicago, Kansas City, Mo., Oakland and South Gate, California. Canadian Distributors: P. N. Soden & Co., Ltd., Montreal and Toronto.

LETHANE *is a trade-mark, Reg U. S. Pat. Off.*

Pioneer synthetic insecticides . . .

★ **THE LETHANES** ★

. . . and still the Foremost

ROHM & HAAS COMPANY

WASHINGTON SQUARE, PHILADELPHIA 5, PA.

Manufacturers of Chemicals including Synthetic Insecticides . . . Fungicides . . . Plastics . . . Enzymes . . . Chemicals for the Leather, Textile and other Industries

of Agriculture in Oregon to work out fair and equitable requirements. After many months of effort, the bill, which would have been satisfactory to this industry, died in committee in the Senate. The Oregon Insecticide and Fungicide Law under which we now operate is, therefore, still in force.

The following bills are still pending at this writing:

MISSOURI. Missouri House Bill 418—"An Act to regulate the sale and use of insecticidal or pest control powders containing sodium fluoride, sodium fluosilicate, arsenic, or any other poisonous compound."

This proposed legislation was first introduced in February of this year as Mo. House Bill 147 as a new section to the Missouri Food and Drugs Law. It has been the position of our industry that our products should not be controlled under food and drug legislation. Your association and others presented their position to the legislators in Missouri, with a substitute bill for consideration. Missouri House Bill 418 is this substitute and as presented is unobjectionable.

FEDERAL ECONOMIC POISONS LAW—you have been supplied with a copy of the revision of the Insecticide Act of 1910 which is called the Federal Economic Poisons Law. This proposed revision calls for federal registration of all products coming within its scope and for the submission of all advertising matter, even though it does not accompany the package, for approval. Up to this time, our Association and others have been informally discussing the proposed revision with the enforcement officials and the revision has not yet been submitted to Congress as a bill.

There are two amendments before the Federal Congress which are in connection with the powers and duties of the Federal Trade Commission.

H.R. 2390, introduced by Mr. Reece of Tennessee, referred to the Committee on Interstate and Foreign Commerce, is entitled "A Bill to amend the Act creating the Federal Trade Commission, to define its powers and duties, and for other purposes." We have had no information as to its progress at this time.

H.R. 3105, by Mr. Barry of New York, is a bill "To amend Sec. 5 (b) of the Act creating the Federal Trade Commission, so as to require publication of facts regarding violations in cases of false advertising of food, drugs, devices, and cosmetics." This also has been referred to the Committee on Interstate and Foreign Commerce." We have no information on its progress.

* * *

Protests were sent to various states such as Massachusetts, Michigan, Illinois, Wisconsin, Ohio, Pennsylvania on pharmacy bills but most of these have been properly amended. All of these legislatures, however, are still in session, with the exception of Pennsylvania and Michigan.

Insecticide Marketing

Problems of merely getting household insecticide needs to the consumer require main efforts of NAIDM Insecticide Marketing Committee

*A report by the chairman**

Lester W. Jones
McCormick & Company

THE activities of the Insecticide Marketing Committee over recent months have necessarily been limited due to the war and the many restrictive government regulations. We have watched carefully the various government orders and amendments to these orders controlling the use of both packaging and shipping containers as well as closures for products of our industry.

When the amendment to M-81 was adopted allowing use of metal for quart and gallon metal containers, but with no provision for pints outside of glass, we immediately contacted the fibre and metal can section of the WPB. We were successful in our appeal to allow the total permissible area of plate to be used in the manufacture of pints and or quarts. This appeal was granted in October, 1944, and was of material assistance to the insecticide and related industries in one of its most troublesome production problems.

In November, 1944, a serious condition arose regarding corrugated boxes. This committee suggested that a request be sent to the industry asking manufacturers to submit figures based on their unit use of packers for the years 1942 and 1943. It was hoped that submission of this data might influence WPB officials in having the percentage raised. But WPB did not receive sufficient information to warrant allowance of 100 per cent of the 1943 pack. However, we were successful in having the figures of 80 per cent of 1941 covered by order L-317. While not affording a complete solution to the problem, this did materially help the overall picture as far as the insecticide industry was concerned.

When M-81 was amended in April, 1945, it was so written as to permit 100 per cent of the plate area used in 1944 to be used in 1945. Inasmuch as many of those in the industry were then packing the majority of

* Other members of committee include Earle Ament, Dethol Mfg. Co.; F. O. Huckins, Sinclair Refining Co.; S. Lefkowitz, Enoz Chemical Co.; H. W. Moburg, Rex Research Corp.; James McConnon, McConnon & Co.; H. W. Allers, Solarine Co.

NO CAUSE FOR ALARM...

In spite of record sales, there is plenty of Thanite to meet current military and all civilian demands. Prompt shipment, in any quantities, from stock points coast-to-coast.

thanite*

HERCULES POWDER COMPANY INCORPORATED *Naval Stores Department, 961 Market Street, Wilmington 99, Delaware*

*Reg. U. S. Pat. Off. by Hercules Powder Company NT-56

their insecticides in glass, we immediately contacted Washington and brought to their attention the fact that this amendment would cause hardship to many concerns. After review, our appeal was granted to permit 100 per cent of 1941 usage, which relieved the situation to a certain extent.

In addition to the work being done by the sprayer committee, the marketing committee has been endeavoring to work with sprayer manufacturers to encourage development of an improved post-war sprayer, which will be as near perfect as possible. We are hopeful that a first rate continuous-type sprayer can be developed which will sell for a price which need not be prohibitive. We hope to have sufficient information in the near future to be able to turn our findings over to the sprayer committee with our recommendations. This problem of designing and getting into production a dependable and adequate sprayer, at a reasonable cost, is one of the most important facing the whole industry.

Considerable thought has been given to sizes and types of containers for insecticides,—also to nozzles, caps, shape of containers and capacity. We are keeping in close touch with the can manufacturing companies and as soon as restrictions are lifted, we will endeavor to have models made for study by the industry.

As far as insecticide marketing developments looking to the future are concerned, this report is not as constructive as the committee would like it to be. But, of necessity, practically all efforts of the committee over the past year have been confined to facilitating the movement of household insecticides to meet the demands of consuming channels, of keeping insecticides going to civilian users in the face of the heavy demands placed upon our industry by direct requirements for war.

With the end of the war and the end of marketing problems growing out of the war, full efforts toward constructive developments to increase the sales and uses of all household insecticides will be in order.

Marketing Sanitary Products

By Leonard B. Schwarcz
Ampion Corporation

Means to broaden the field in sanitary specialties selling*

MARKETING in commercial parlance concerns itself with means and methods of distributing wares or services to the waiting or even an apathetic public. In the present period of merchandise scarcity, marketing in its usually accepted meaning has been deleted from the priority list of worries of sanitary specialty manufacturers as well as most others. Yet our biggest headache today is marketing! But in the sense that the housewife understands it—trying to buy steaks, groceries and other foodstuffs with limited points for a family of big appetities. This kind of marketing or calling it by its more common name, — buying — is fraught with headaches.

Allocations, quotas, restrictions, scarcities, slow deliveries, unsatisfactory substitutes, myriads of paper work, help shortage, etc. still continue to plague us. The fact that the war in Europe has terminated may ease up this situation somewhat. More materials and labor will probably be available. When Japan is beaten and this may be sooner than is generally expected, more raw materials will flow into civilian channels, the labor and salesman situation will ease up and business will tend to normalize, which means a buyers' market again. Then marketing will once more assume and *probably exceed* its former importance.

The post-war situation will not be a "business as usual" affair. A new set of conditions will have to be met and successful plans cannot be developed overnight, so it may be well to briefly examine into the post-war marketing problems that will face the industry. For one thing the public will be more sanitation conscious. Eleven million discharged veterans having come in prolonged personal contact with filth of all sorts and insect pests, will not tolerate them in their homes or where they work. However, the increased demand for our products at home as well as abroad is no assurance that marketing plans can be forgotten or relegated to the background. A small percentage of our manufacturers will capture the majority of the business and the balance will just struggle along fighting for the crumbs, as in the past,—unless a new and more progressive concept is adopted by all.

As this industry is composed of a fairly large number of small concerns their marketing methods and problems should concern us. In prewar times it has been said that for every concern that purchases liquid soap, disinfectant and insecticides, etc., there are ten others who ought to use them, *but do not*. As an overall picture it seems we are not putting our story across, notwithstanding that we have essential and desirable products to offer.

* Summary of mid-year report of Sanitary Specialties Marketing Committee of NAIDM before Board of Governors, June 6, 1945. In addition to Mr. Schwarcz, chairman, other members of the committee include Henry J. Brownstein, Hysan Products Co.; Joseph Fuld, Fuld Brothers; R. M. Lockhart, Candy & Co.; B. H. Reschke, Pioneer Mfg. Co; George L. Simmonds, U. S. Sanitary Spec. Corp.

FOR MAXIMUM KILLING POWER

USE THE RIGHT INSECTICIDE IN THE HUDSON WIZARD ELECTRIC SPRAYER

Here's a sprayer that does a real job—that breaks up solutions into so fine a spray that complete penetration and maximum killing power is assured. The Hudson Wizard Electric Sprayer is designed to handle liquid insecticides, disinfectants and deodorants with equal efficiency.

Neat, compact, durable, light and easily portable, the Wizard runs on AC or DC (110-120 volts). It can be carried by the operator for directional spraying or operated as a stationary unit for room treatment. Powder attachments available.

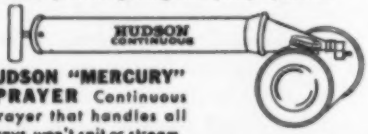
Write for complete descriptive folder.

H. D. HUDSON MANUFACTURING CO.
589 E. Illinois Street, Chicago 11, Illinois
Branches in Principal Cities in U. S.

HUDSON
Tested and Proved
SPRAYERS AND DUSTERS

EFFICIENT SPRAYERS AND DUSTERS FOR ALL NEEDS

HUDSON "CADET" DUSTER Uses all insecticide powders. Light, easy to handle, a big favorite with many users. Air valve prevents powder getting into pump cylinder.



HUDSON "MERCURY" SPRAYER Continuous sprayer that handles all sprays, won't spit or stream. Pump passes through top of tank and is securely soldered, preventing possibility of parts getting out of alignment.

HUDSON "CLIPPER" SPRAYER Used with any solution for every exterminating and disinfecting purpose. Swivel locking nut permits easy adjustment of nozzle and extension. Sectional nozzle quickly adaptable for finest spray or solid stream. 1½ gallon capacity.

Fundamentally, general marketing of sanitation supplies is contrary to proven successful practice in other lines. The average salesman will talk fluently about the quality and price of his liquid soap, for example. How much more resultful it would be if he would stress the genuine benefit the purchaser would receive in the way of appreciation, cooperation and loyalty of his employees by showing them he is taking care of their welfare by providing sanitary and convenient washing facilities. For a restaurant, hotel keeper, service-station owner, clean and non-odorous sanitary washrooms will pay for themselves.

Apply the same principle to another item, disinfectant. Its coefficient, solubility, etc., may seem important to the manufacture and it is played up in literature and sales presentation, yet it just seems like another useless expense to many prospects unless the method of sales approach is changed. If a manufacturer can be shown how he can save lost man-hours due to preventable sickness and disease in his plant, that is a language in which he is interested. The same principle applies to *all sanitation* items. The stress must be on the benefits which the customer will receive and the soft pedal should be on the product itself.

There is nothing new about this type of merchandising. It has been found to be successful in similar lines and must work for sanitary products too. For instance a successful paint manufacturer will show a picture of a drab kitchen and another of one which the housewife has dreamed about,—and just think a quart of Blank brand cerulean blue, a pint of cerise and a half-gallon of Oriental magenta will accomplish this transformation in hubby's spare time. Not a word mentioned about quality, spreading qualities or price.

Take some soap advertising,—if a wall-flower uses a certain brand for 17 days—what happens? Her 'phone rings constantly; she's soon dated up for every evening in the week, and before she knows it, she's engaged. Let the average sanitation products manufacturer try to sell that same soap and he would probably stress its pure oils, lathering qualities and low price. Hosts of comparative examples could be cited.

It might be a violent shock to some of us to have to revamp our marketing plans to take them out of their 19th Century category, but eventually it can and will be done. If the individual manufacturer lacks the necessary "know how" he can consult with an advertising and sales specialist whose ability, knowledge, imagination and experience in similar lines can be of valuable assistance. But the period of change is upon us, and with the return of normal sales competition, sales methods for sanitary supplies as well as many other necessities will have to be revamped to meet new conditions never before encountered.

FLOOR WAX TESTS . . .

Summary of mid-year report of the Sanitary Specialties Scientific Committee to NAIDM*

By Arthur C. Pabst
Socony-Vacuum Oil Co.

DURING the past six months, the efforts of the Sanitary Specialties Scientific Committee have been directed toward the formulation and adoption of a satisfactory specification and standard method of test for water dispersion floor wax. In this activity the committee is cooperating with the National Bureau of Standards of the U. S. Department of Commerce.

It is well known that at the present time there are numerous specifications covering the water emulsion floor wax, some good and some bad. There are federal specifications including Army and Navy, many state specifications, as well as many formulated by business organizations for their own use, each organization writing its own tests and requirements thus causing considerable confusion. It is difficult for the average wax manufacturer to keep abreast of this situation and impossible for him to furnish a product to meet all specifications.

As mentioned above, this committee is endeavoring to draft a minimum requirement specification consistent with satisfactory performance. It is hoped wax manufacturers will adopt it as a commercial standard for the industry. The advantage of having a commercial standard is that it tends to promote uniformity among specifications that are issued by different organizations, most organizations adopting a commercial standard outright.

The proposed commercial standard specification now being studied by the committee covers the following requirements:

1. Purpose of Specification.
2. Scope of Specification.
3. Purpose of Product.
4. General Nature of Product.
5. Self-polishing Characteristic.
6. Sediment.
7. Stability.
8. Total Solids.
9. Color of Wax Film.
10. Leveling and Spreading.
11. Gloss or Lustre.
12. Alkalinity.
13. Drying Time.

* Before NAIDM Board of Governors, June 6, 1945. In addition to Mr. Pabst, chairman, other members of the committee include Paul Amman, G. H. Wood & Co., Ltd.; L. D. Benedict, Plunkett Chemical Co.; W. Kaye, Fuld Brothers; C. S. Kimball, Foster D. Snell, Inc.; C. T. Reinhart, Shell Oil Co.; R. B. Trusler, Davies-Young Soap Co.; Vladimir Tuma, Buckingham Wax Co.

WHY POST-WAR PYROCIDES WILL DO A BETTER JOB

When the Government decided to use all the available supplies of pyrethrum in Aerosol Bombs for malaria control, industry was faced with some new problems. Among them was the problem of producing on a commercial scale a pyrethrum extract free from the resins and waxes that occur naturally in pyrethrum flowers.

Extracts were then available which were about 90% soluble in liquid "Freon" which is used in Aerosol Bombs, but none was entirely satisfactory. The first efforts toward improvement produced extracts which were about 96% soluble, but even greater purity was necessary. Study of the problem by McLaughlin Gormley King Company scientists resulted in an extract, "Pyrocide 160," so pure that 99.25% to 99.50% is soluble in "Freon." With "Pyrocide 160" as a standard, it became possible for the Services to demand that the whole industry produce better extracts. For example, U. S. Navy specifications now permit only extracts which are 98.5% soluble.

Just as "Pyrocide 160" now leads the field and is the preferred pyrethrum extract for war use, we believe "The Pyrocides" will set the standards for the industry in the post-war period. The new process for making "Pyrocide" free from impurities will also make these *purer, better* pyrethrum products for your *post-war* use:

PYROCIDE 20—The original, standardized, concentrated clarified pyrethrum extract, but purer, and freer from color, odor, and irritating impurities.

PYROCIDE 40—Twice as strong as PYROCIDE 20, and better adapted than ever before to making livestock sprays and agricultural dusts and sprays.

PYROCIDE 160—the Aerosol Bomb extract which is truly called "the purest form of pyrethrins commercially available." Eight times as strong as PYROCIDE 20, PYROCIDE 160 is 99.25% to 99.5% soluble in "Freon." When you pack Aerosol Bombs for your customers after the war, the superior purity of PYROCIDE 160 will give you fewer packing problems and better Bombs to sell.

DRY PYROCIDE—The original stabilized solid pyrethrum concentrate for making horticultural dusts. The new process makes it easier to mix with diluents, and the resulting dust flows more freely—will do an even better job.

At present, pyrethrum is restricted to use by the Armed Forces. When we can offer you pyrethrum again, you will like these better products.

McLAUGHLIN GORMLEY KING CO., Minneapolis, Minn.

PYROCIDE 160

★ ★

★

14. Flexibility of Film.
15. Abrasion Resistance.
16. Tackiness.
17. Water Resistance.
18. Removal of Film.

There are, of course, many other requirements that could be specified but, as mentioned previously, emphasis has been placed on a minimum number of tests consistent with satisfactory performance. Purposely, no attempt has been made to regulate the composition and the manufacturer has complete freedom in the choice of raw materials, providing the product will give good performance. The committee is in agreement on all of the above requirements and methods of testing with the exception of gloss and color of wax film which requires additional consideration.

Samples of test products and proposed methods of evaluation have been distributed to the members for testing and comment. The measurement of the gloss and color of the wax film are two highly important characteristics relating to performance and, as a rule are not covered by existing specifications because satisfactory methods of test have not been developed. Briefly, the two proposed tests are as follows:

Gloss Determination

SEVERAL linoleum manufacturers were approached for their opinion as to whether or not they thought a linoleum surface would be satisfactory for gloss determination. One manufacturer did not believe it would be satisfactory; however, several other manufacturers stated that they felt it would be satisfactory, providing the linoleum is obtained under Federal Specification LLL-L-351a, that the brown color would be preferable and, if possible, it should be unwaxed or unlacquered. It is also the committee's opinion, as well as that of the Bureau of Standards', that linoleum would be a satisfactory surface provided a maximum limit is set on the gloss of the unwaxed linoleum. If necessary, the surface coating of the linoleum is removed and the panel is measured for 60° specular gloss according to Procedure C of A.S.T.M. Tentative Method D523-44T for the Specular Gloss of Paint Finishes. Tests show that clean, unwaxed linoleum has a gloss in the neighborhood of 1.5. It is proposed that samples of clean linoleum having a gloss of 1.5 ±0.1 be dipped in the wax emulsion (adjusted to 12 per cent total solids) and allowed to air dry in a vertical position for at least 24 hours. At the end of this time the surface of the panel shall again be measured for 60° specular gloss according to the A.S.T.M. method given above. For all measurements of gloss, calibrated working standards having clean surfaces and about the same glossiness as the panel being measured shall be used. By the above test an actual measurement of gloss can be made on floor surfaces and the committee is at present setting up a numerical value for the minimum gloss necessary for good performance.

Color of Wax Film

THE color of the film deposited is an important characteristic of the water dispersion floor waxes, but heretofore, no accurate method of measurement has been put forth.

It has been found that color of the wax film can be accurately measured by use of the reflectometer. Strips of No. 1 Whatman filter paper are dipped into wax emulsion (adjusted to 12 per cent total solids) and air dried in a vertical position for 24 hours. At the end of this time the 45°, 0° apparent reflectance is measured 1 inch below the top of the dip according to A.S.T.M. Tentative Method D307-44T. The instrument used is the multi-purpose reflectometer described in N.B.S. Res. paper RP-1345. Color tests on three representative grades of non-rub wax are shown below:

Samples of the above wax emulsions and filter paper are in the hands of the committee for testing and comment. It is proposed to set the specification so that only the excessively dark to black grades of Carnauba wax will be unsuitable for use in this type of floor wax. It is well established that the very dark grades of Carnauba wax cause staining and discoloration particularly on light-colored floors.

When the above work has been completed, the revised specification will be submitted to the U. S. Department of Commerce which in turn will submit it to interested manufacturers for approval.

—— • ——

Fly-Killing Compounds

Compounds such as the ethers of eugenol were found to be more effective than solutions of the corresponding isoeugenol derivatives. Solutions of the cis forms of isoeugenol approached the toxicity to houseflies shown by solutions of the corresponding eugenol compounds. The transforms were less toxic in solution alone than when included with small quantities of pyrethrins. T. F. West. *Nature* 154, 488.

—— • ——

Pyrethrum Purification

Impure pyrethrum extracts are distilled with sesame oil for purification. The oil acts as a foam inhibitor. The distillate contains purified pyrethrum and sesamin. L. D. Goodhue and H. L. J. Haller, to the Secretary of Agriculture. U. S. Patent No. 2,358,292.

Panel	*Wax Content of Emulsion*	45°, 0° *Apparent Reflectance* (*MgO*)-1.000) *Blue Filter*	*Amber Filter*	*Green Filter*
Test No. 1	10% No. 1 Yellow Carnauba	0.637	0.796	0.784
Test No. 2	10% No. 3 Refined Carnauba	.518	.726	.698
Test No. 3	10% Dark No. 4 Carnauba (chocolate brown color)	.378	.607	.567

yes, MERCK is making

. . . the Remarkably Effective Insecticide

Chemically known as dichloro-diphenyl-trichloroethane, "DDT" is highly effective against body lice, bedbugs, flies, and other insects and vermin which are a menace to humans, animals, and plants.

Although the full scope of its insecticidal applications has not been explored, "DDT" very definitely is an important tool in the hands of the insecticide manufacturer and pest-control operator.

For many years, Merck has been producing one of the basic chemicals employed in the manufacture of "DDT" and thus it is only natural that we should be at the forefront in the production of this powerful new insecticide.

As production levels rise and restrictions are lifted, Merck & Co., Inc. will find increasing opportunities to co-operate with industry and serve as a basic and prime source of supply for this very promising product.

MERCK & CO. Inc. *Manufacturing Chemists* **RAHWAY, N. J.**

New York, N. Y. • Philadelphia, Pa. • St. Louis, Mo. • Elkton, Va. • Chicago, Ill. • Los Angeles, Cal.

In Canada: MERCK & CO. Limited, Montreal and Toronto

OFFICIAL TEST INSECTICIDE...

How and why of the OTI as put out by NAIDM for Peet-Grady Insect Spray Testing

THE Official Test Insecticide is a solution of pyrethrum extract in refined kerosene containing approximately 100 milligrams of total pyrethrum per 100 cc. at 60° F. This is the equivalent of a B Grade insect spray. The Official Test Insecticide, or OTI as it is commonly known in the insecticide industry, is made up once annually under the auspices of the National Association of Insecticide & Disinfectant Manufacturers. The product is made up and bottled in May of each year and is considered "official" for testing purposes from June 1 of that year through May 31 of the following year. In other words, the OTI which was produced in May of this year is known as the 1945 OTI and is "official" beginning on June 1 just passed until May 31, 1946. The 1944 OTI became obsolete on June 1.

In view of the fact that the Official Test Insecticide has been used in comparative testing by the Peet-Grady Method for evaluating insect sprays for a number of years in all parts of the world and there still appears to be some confusion at times as to its composition and purpose, a brief explanation may be timely. This is particularly true in the light of new developments in the insecticide world and of projects now being undertaken by the Insecticide Scientific Committee of NAIDM.

The purpose of the OTI is to supply a standard test solution for use in evaluating commercial insect sprays by the Peet-Grady Method. According as a commercial insect spray shows up in the test against common house flies, it is thus classified as AA, A, or B Grade under the specification of the NAIDM for household insect spray which is the same as Specification CS 72-38 for Liquid Household Insecticide of the National Bureau of Standards. An insect spray which shows a kill by the Peet-Grady Test of 16 per cent or higher above the kill of the OTI when tested simultaneously with the OTI is designated as AA Grade. A spray which is 6 to 15 per cent higher than the OTI is designated as A Grade. A spray which shows the same kill on house flies as the OTI within a range of minus 5 to plus five per cent is classified as B Grade. Any product falling more than 5 per cent below the kill of the OTI is generally classified as sub-standard.

The original purpose of the OTI which was first produced and distributed by NAIDM in 1936, was to give insecticide manufacturers, laboratories and others a standard by which Peet-Grady test results would be more closely comparative, particularly test figures from different laboratories which had previously shown such wide variations as to be in many instances valueless for purposes of comparison. The advent of the OTI aided in reducing the error due to the biological variations in the testing medium,—the wide difference in flies from laboratory to laboratory. It furnished a yardstick for calculating comparative kill. Instead of figuring kill of flies by the Peet-Grady Method in absolute percentage dead after 24 hours as had been the method, — where some laboratories might obtain a 50 per cent kill and another an 80 per cent kill with the same insect spray due to variation in flies,— the variation from the OTI yardstick became the means of evaluation and classification of the product tested.

THE OTI is composed of straight pyrethrum extract because thus far pyrethrum has been the most suitable product for the purpose. It is a commonly used insecticide ingredient available from a number of sources. When it was selected as the basis of the OTI, most insect sprays were composed of pyrethrum in whole or in part. Various chemical solutions have been tried out as prospective candidates for the OTI, but as far as is known, each has had some drawback. And although pyrethrum extract is obviously far from the perfect product for a test standard which must be stored for periods up to a year, it remains as the basis for the OTI apparently in the absence of something which has proved to be better from all angles.

Actual production of the OTI each year is a comparatively simple procedure. A quantity of regular commercial 20 to 1 pyrethrum extract is obtained from one or more of the pyrethrum products houses. This is then tested by both the Seil and the Official Mercury Methods for pyrethrins. Five laboratories cooperate in this work including the official insecticide testing laboratory of the U. S. Department of Agriculture. From an average of these first results, the pyrethrum extract is diluted to give approximately 100 milligrams total pyrethrins per 100 cc. at 60° F. (The pyrethrum concentrates as received usually run between 2.00 and 2.10 grams per 100 cc.). The diluted pyrethrum extract is then tested by the Peet-Grady Method against the previous OTI and also tested chemically. From these figures, a final dilution correction is made. The chief aim is to obtain a finished OTI which is as close as possible to the OTI

(*Turn to Page* 141)

"The bigger the family—the better the service"

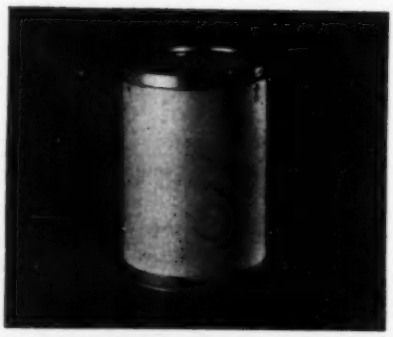
LUCKY the man who has a big family of kids to wait on him! So is the customer who consults Continental, largest united family in packaging.

We can give you unusual service. The variety of containers we're making now is proof we'll give you the container you need.

Impartial research analyses by experts, and wide facilities assure you we can produce your ideal package. We make metal containers, liquid-tight paper cups and containers, fibre cans and drums, steel pails, and varied heavy duty containers.

Right now we're working hard for Uncle Sam. But keep your eye on Continental! And on Continental's trademark, too! The Triple-C stands for *one* company with *one* policy—to give you only the very best in quality and service.

Tune in: "REPORT TO THE NATION" *every Saturday over coast-to-coast CBS network*



Continental Fibre Drums—Continental makes a full line of fibre drums, both the all-fibre and the metal-end types, for shipping chemical and pharmaceutical products. "FIBERPAK," an all-fibre drum (from ¾ gal. to 67 gal. capacity), and "LEVERPAK" (from 12 gal. to 75 gal. capacity), for finer chemicals and similar expensive materials; "STAPAK" Drums (from 2 gal. to 32 gal. capacity) for less costly materials such as soap powders, cleansers, colors, detergents. Wide selection of linings, coatings, treatments and constructions to meet specific requirements.

CONTINENTAL CAN COMPANY, INC.

CONTINENTAL PAPER DIVISION

FIBRE DRUMS The Container Co., Van Wert, Ohio

LIQUID-TIGHT FOOD CONTAINERS — Boothby Fibre Can Co., Roxbury, Mass.

PAPER CUPS AND FOOD CONTAINERS — Mono Containers, Newark, N. J.

COMBINATION PAPER AND METAL CONTAINERS

Headquarters: 330 W. 42d St., New York 18, N. Y.

13 Plants — Sales offices in all principal cities

Post-War Outlook for
The BRITISH SOAP INDUSTRY

BY

PAUL I. SMITH

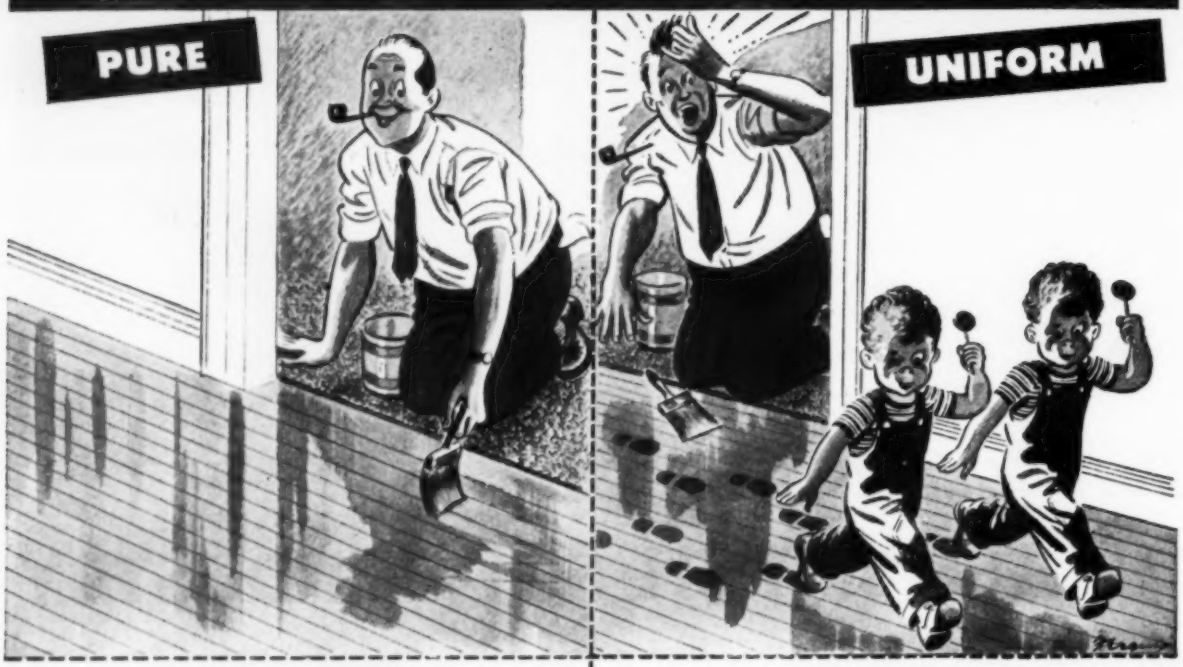
THE large soap combines in Britain are generally quite happy about the post-war outlook as they realize that with a return to normal trading there will be a greatly increased demand for all quality soap lines. Manufacturers of speciality flakes, powders, washing preparations and luxury toilet soaps, have throughout the war been careful not to lower quality to any noticeable extent, and in those cases where previous very high quality could not be maintained owing to shortage of certain raw materials, the products have in many cases been taken off the market.

It is significant that the maximum permissible amount of advertising space is now being booked in the national dailies, weeklies and monthlies to cover build-ups for post war soap sales. This advertising is taking various forms, and in the case of "Lux," which has been withdrawn from sale on the British market for several years, the appeal is directed as a reminder. Incidentally "Lux" advertisements have during the war years taken the form of a wartime clothes service, and after giving advice on how to make a pinafore, cushion cover or apron from old clothes, there is a reminder that now there is no "Lux," extra care needs to be taken when washing colored fabrics, and that housewives should rinse carefully or undissolved soap may stick to the material and make it look dingy. This is, of course, a tacit admission of the prevailing low quality of soap flakes, but prepares the way for the reappearance of a higher quality product.

Practically all soap lines advertised in Britain today are either not on the market, or in very short supply, and, in consequence advertising space is devoted mainly to maintaining prestige. Soap executives realize that as soon as soap comes off rationing and more raw materials become available, then there will be be a big demand for the best the industry can offer, irrespective of price. It is seldom appreciated that shortages during war have proved of great publicity value to manufacturers. The fact that people throughout the country are day by day asking for certain brands means that enormous potential post war sales are being built up. Many advertisements contain the advice to the public to keep asking for a certain line, even if it is difficult to secure, as eventually they will be lucky enough to obtain a packet or a tablet or tube, etc. Early in the war, soap executives decided that it was the wisest policy for the duration to abandon their trade marked products and to manufacture only unbranded soap lines. Thus they have preserved

Du Pont PARAPONT*

PARA-DICHLOROBENZENE



ADAPTABLE, TOO! Meets every commercial need. When ordering para-dichlorobenzene, specify "Parapont" with confidence!

E. I. du Pont de Nemours & Co. (Inc.),
Organic Chemicals Department,
Wilmington 98, Delaware.

*REG. U. S. PAT. OFF.

DU PONT

REG. U. S. PAT. OFF.

BETTER THINGS FOR BETTER LIVING
...THROUGH CHEMISTRY

Buy MORE Bonds in the 7th War Loan!

the established position of their trade marked brands for the post-war years.

POST-WAR soap trade will, more than ever before, be dictated to and governed by the large combines which have prospered during the last six years and have been generally favored by government departments. Discrimination shown to the larger firms has not been due to policy so much as convenience. It is, after all, more convenient to deal with two or three very large concerns than a couple of dozen small firms, and the civil servants who run the various Ministries have shown no disinclination to take the easier course. It seems evident that many of the smaller and lesser known soap factories will eventually be absorbed and that Britain's soap manufacture will tend more and more to be concentrated in fewer hands. It is not the author's concern to discuss the ethics of monopolies, but the writing is clearly on the wall and all in the industry have read the message.

Small soapers in Britain have not been in a very enviable position during recent years. During the war they have been alloted limited quantities of raw materials to make ordinary ration soaps, and they have jogged along quite comfortably. When assured sales no longer operate and competition becomes intense they will quickly realize that against famous names and the highest quality they have nothing to offer but cut price and some kind of inducement to buy. It is certain that when trading conditions return to normal the public will demand the best; the brands kept alive by subtle advertising and impressed on the memory because of the purely negative reason of being unable to obtain supplies during wartime. For a few years, money will be fairly free and a nation restricted by rationing will spend freely, even perhaps unwisely, on luxury lines condemned as wasteful or unnecessary during the stern years of conflict. The large combines will cash-in freely on this new spending mood as they manufacture all the famous brands, the very soaps and speciality lines the public cannot buy today. It is no wonder, therefore, that officials of these larger firms view the future with confidence and expectation.

Considered likely by acute observers in the soap industry is the anticipated return of premium offers to encourage the sales of little known household soaps put up by the smaller manufacturers. Before the outbreak of hostilities in Europe, several manufacturers operated a towel soap, so called because a full length bath towel was offered in exchange for a dozen or more one-pound cartons. This scheme proved quite successful in rural areas and working class districts. Naturally with textiles likely to be in short supply for at least two years after V-Day, a towel scheme could not operate for some time, but the same argument does not necessarily apply to other types of premiums. Meanwhile small soapers are hoping that rationing will continue for as long as possible. It is interesting to note that generally speaking the soap industry is not too anxious to finish with rationing, and the reasons are fairly obvious. In the case of firms not in the big combines, the existence of sales control and the various restrictions forming part and parcel of the scheme mean an assured if somewhat limited sale and reasonable profit. As far as the large firm is concerned, it would not pay to remove the ban on sales until the highest quality raw materials could be made available, also packaging materials and unrestricted advertising space.

There are not likely to be any major changes in regular lines of soap when trading conditions return to normal, but it is thought that the vogue will be for more delicately and exquisitely perfumed toilet soaps. Britain is starved of perfume and during these bleak years of war a great potential demand has been built up for old and new fragrances. Super fatted soaps and special cosmetic soaps, banned for years, are likely to be best sellers. Considerable post-war expansion may also be expected in sales of synthetic detergents.

OFFICIAL TEST INSECTICIDE

(*From Page* 137)

of the previous year both chemically and in Peet-Grady results.

When the OTI is completed, it is packaged in six-ounce brown bottles, each wrapped in paper and packed six to the carton. In each carton, there is included a printed copy of the NAIDM specification, the Peet-Grady Method, and an explanation of grade designations. Approximately 250 dozen bottles are distributed each year. The OTI sells for $5.00 per dozen bottles to members of NAIDM and all government laboratories. To others, there is a service charge in addition of $1.00 per dozen bottles. Single bottles sell for $1.00 each. The OTI is sold only direct from the office of NAIDM in New York. Over a period of years, it has been shipped to all parts of the world and is widely used in Europe, South America, Africa and elsewhere as the test standard for household insect sprays. NAIDM states that its office is not able to handle any except domestic shipments of OTI direct. Orders for export should be placed through a representative or agency in the U. S.

At present, the Insecticide Scientific Committee of NAIDM is undertaking an investigation which may eventually mean a change in the composition of the OTI. Because the present OTI approximates only a B Grade spray, it has often been criticized as a standard both by American and other government officials. There are those scientific men in the insecticide industry who share this view. With this in mind, a special grade of test insecticide is being made up this year by NAIDM for distribution to members of the Insecticide Scientific Committee *only* for research purposes. The so-called "research" OTI is a pyrethrum extract approximating an AA Grade spray, containing 160 milligrams total pyrethrins per 100 cc. As in the regular OTI, the division of Pyrethrin I and Pyrethrin II in this special product is to be about equal but with variations which commonly reflect the normal variations in pyrethrins content of the flowers. Reports on investigational work with the "research" OTI will probably not be available until some time in 1946. But it is likely that this work will eventually result in replacing the present type of OTI with a different official test insecticide.

IF you had formulated an EMULSION WAX, we know you would have made it just like CRYSTAL BRITE. You may not know the first thing about formulating and producing Self Polishing Wax but if you did you would say I want to make a product that will dry with a very high gloss—will self level regardless of how carelessly it is applied—will resist water and will wear for a long period of time and remain as free of smears and scuffs as possible.

You can have such a product at a very attractive price under your own label by merely writing . . .

T. F. WASHBURN CO.

2244 ELSTON AVE. CHICAGO 14, ILL.

Manufacturers of Floor Finishes For 59 Years

TECHNICAL Briefs

From Current Literature in the Sanitary Products Field

Quaternary Ammonium Bactericides

The quaternary ammonium compound, cetyl pyridinium chloride, is bacteriostatic or bacteriocidal to bacteria found in the oral cavity. A solution containing 0.025 per cent or 1:4000 parts of the active ingredient in a base of 18 per cent alcohol, 10 per cent glycerine, and 70 per cent of distilled water, showed a bactericidal efficiency of 90.6 per cent in an average of 21 cases, after a period of 3 hours. This germicidal activity is greater than that reported for the National Formulary Antiseptic solution after 1 hour, 3 per cent hydrogen peroxide after 2 hours, and two well known organic mercurial germicides after 2 hours. C. Lee Huyck. *J. Am. Pharm. Assoc.* 34, 5-11 (1945).

Control of Sheep Ticks

Methods of controlling sheep ticks and lice are reviewed by H. H. Schwardt and J. G. Matthysse in an article in the April 1, 1945, issue of *Farm Research,* published by the Cornell University Agricultural Experiment Station. Before rotenone became scarce, say the authors, it had almost entirely replaced coal tar creosote, nicotine and the various arsenicals for control of ticks and lice on sheep. It was found that one pound of 5 per cent rotenone powder and ten pounds of wettable sulfur in 100 gallons of dip would eradicate the sheep tick at one dipping. In the absence of rotenone, a satisfactory substitute has been found in a phenothioxin-bentonite-sulfur mixture, which is said to be just as effective although higher in price. The combination containing 7 per cent of phenothioxin, 7 per cent of bentonite, 6 per cent of a wetting agent and 80 per cent of sulfur, is incorporated in a quantity of 8 lbs. in 100 gallons of dip.

Insect-repellent Paper

A 2-ply asphalt-laminated Kraft paper sealed with an asphalt adhesive, resisted feeding by 4 species of cockroaches, 3 species of thysanurans and partially resisted 1 species of subterranean termite. Of the species tested, the firebrat (*Thermobia domestica*) and the termite (*Reticulitermes flavipes*) will probably penetrate wrapping paper most rapidly. Addition of pentachlorophenol to the adhesive for fungicidal purposes greatly reduced the attractiveness of the paper to cockroaches, and to all thysanurans except the firebrat. Termites built tubes over paper with 0.3-1.0 per cent pentachlorophenol in the adhesive but did not damage the paper. H. L. Sweetman and A. I. Bourne. *J. Econ. Entomol.* 37, 605-9.

Compatibility of DDT

Some of the more common insecticides, fungicides, and fertilizers have been tested for catalytic action in the dehydrochlorination of DDT. Materials used for diluents have been shown to vary in their activity in promoting the decomposition of DDT. The anhydrous chlorides of iron, aluminum, and chromium are active dehydrohalogenation catalysts for DDT. The catalytic action of anhydrous ferric chloride is promoted by solution in naphthalene, chloronaphthalene, chlorobenzene, *ortho-* and *para*-dichlorobenzenes, and nitrobenzene, and inhibited by various hydrocarbon and fatty oils, alcohols, ketones, acids and anhydrides. E. E. Fleck and H. L. Haller. Ind. Eng. Chem. 37, 403-5 (1945).

Checklist for Insecticides

New insecticides should be examined with respect to the following questions, according to F. C. Bishopp of the Bureau of Entomology and Plant Quarantine:

1. How effective is it for killing insects?
2. What is its toxicity to higher animals and man, by contact and by ingestion?
3. What is its toxicity to plants and the soil?
4. Can it be compounded in such a way as to make it satisfactory for application under the many and diverse conditions under which an insecticide is used?
5. Is it compatible with the common fungicides? In many cases it is desirable to compound an insecticide with materials to control plant diseases.
6. Can it be applied with standard equipment? This is important under wartime conditions.
7. What are the limits of its usefulness?

J. A. Rodda. Chem. Industries 56, 409 (1945).

Warn on Crow Repellents

The New York State Agricultural Experiment Station, Geneva, N. Y., has recently issued a release warning that the application of sticky coal tar crow repellents to seed retards absorption of moisture by the seed and thus delays germination. With a longer germination period, birds thus have a better chance to pull corn seedlings from treated than from untreated seed. The Station recommends a dust seed protectant in view of its findings.

Casein Spreaders for Insecticide

For supplements to agricultural insecticide sprays, ordinary soaps have been replaced to a large extent by improved casein spreaders, sulfonated oils, oil emulsions, sulfite waste liquors, sulfated alcohols and fatty acids, petroleum sulfonates and sulfonated naphthalene. In addition to being highly effective as wetting and spreading

Dependable Agricultural Insecticides, Fungicides and Wetting Agents

LETHANE B-71—Powerful insecticide concentrate, replacing rotenone and other war-scarce botanicals in contact dusts

LETHANE B-72—Same powerful agent as LETHANE B-71, for use in sprays

LETHANE 60—Improves rotenone dusts and extends supplies of rotenone in sprays and dusts

DITHANE D-14—New type synthetic organic fungicide for control of blight on potatoes and other vegetables

CUPRO-K—Fungicide for the control of cherry leaf spot

TRITON B-1956—Emulsifier, spreader and deposit-builder in both insecticidal and fungicidal sprays

TRITON X-140—Efficient emulsifying agent for agricultural sprays

For additional information on any of these products, write or call our nearest office—Philadelphia, Chicago, Kansas City, Mo., Oakland and South Gate, California.

LETHANE, CUPRO-K, TRITON and DITHANE *are trade-marks, Reg. U S. Pat. Off*

ROHM & HAAS COMPANY

WASHINGTON SQUARE, PHILADELPHIA 5, PA.

Manufacturers of Chemicals including Synthetic Insecticides . . . Fungicides . . . Plastics . . . Enzymes . . . Chemicals for the Leather, Textile and other Industries

agents, they are compatible with most insecticides and with hard water. The better adhesives for sprays and dusts consist of rosin emulsions, natural gums, soybean and wheat flour, oils, colloidal resinous materials, etc. Such products may be used with spreading agents or may be used separately. Finely divided earths, ground peat, wood or bark flours, nut shell flour and charcoal products are used for conditioning insecticides and fungicides for use as dusts. W. H. Tisdale. *Canadian Chem. & Process Industries* 29, 73-7 (1945).

◆

Control of Head Lice

Adults and eggs of lice which grow on the hairy portions of the body can be controlled by one treatment with pyrethrum. Preparations containing an odorless petroleum-base oil are preferable. Oil of geranium, neroli, citronella or lavender will give a pleasant odor. D. N. Roy and S. M. Ghosh. *Bull. Entomol. Research* 35, 231-4.

◆

Mosquito Larvaecide

A solid insecticide is prepared by melting together 1-trichloro-2,2-bis-(para-chlorophenyl) ethane and a waxy solid such as stearic or palmitic acid, in a mutual volatile solvent such as benzene. The solvent is removed by evaporation. The ratio of the ingredients may vary from 1:4 to 1:9 parts of the first to the second ingredient. The resulting solid is ground in a hammer mill and applied as dust for killing mosquito larvae. C. C. Deonier and H. A. Jones, to the free use of the people of the U. S. U. S. Patent No. 2,349,814.

◆

Preventing Fungus Growth

To combat the growth of fungi in tropical climates, Westinghouse electrical apparatus is being given treatment based on the experience of the U. S. Military Services. The last varnish treatment applied to motors, control apparatus and radio equipment, has added to it a small amount of substance toxic to fungus. This substance develops a very low but continual vapor pressure adequate to prevent fungi from taking root on the surface. Chem. Industries 56, 474 (1945).

Licuri Wax Characteristics

Licuri wax, exported to the extent of some thousands of tons from Brazil, has been compared as to characteristics with carnauba wax:

	Licuri wax	*Carnauba wax*
Melting point	84.8° C.	85° C.
Saponification value	78.8	79
Iodine value	8.6	10
Ester value	73.5	75
Acid value	5.5	4
Total fatty acids	47.5	47.9
Specific gravity at 15° C.	1.010	0.999

Both are soluble in hot alcohol and ether. Licuri wax has a slight orange color. It can be used as a cheaper material in place of carnauba wax and is suitable for the same purposes.

The two waxes can be readily distinguished in the laboratory. The particles present a different appearance under the microscope. A solution obtained by shaking violently 3 grams of licuri wax in 10 cc. of a 10-20 per cent solution of caustic soda gives a yellow-orange color, while carnauba wax treated the same way gives no color. *Chem. Trade J. & Chem. Engineer* 115, 525-6 (1944).

◆

Piperic Acid as Insecticide

Martin E. Synerholm, Albert Hartzell, and John M. Arthur report their findings as to the toxicity of derivatives of piperic acid toward houseflies in the January-March, 1945 issue of *Contributions from Boyce Thompson Institute*. Their conclusions are summarized as follows:

1. A wide variety of esters and substituted amides of piperic acid are toxic toward houseflies.

2. The most toxic amides are those derived from primary or secondary alkyl amines containing from three to seven carbon atoms. In the ester series the most effective are derived from alcohols with more than three but less than seven carbon atoms.

3. The amides and esters of piperic acid have a synergistic action when used in conjunction with pyrethrins against houseflies.

4. Esters prepared from phenols and amides from aromatic amines are relatively non-toxic.

5. The methylenedioxy group, which appears to be important in ascribing toxicity to the piperic acid residue, does not enhance the activity when it appears also in the substituents.

6. The presence of a thiocyano group in either an aliphatic or aryl piperate renders the compound less effective.

7. The presence of halogens does not seem to improve the activity. In some cases, namely the esters, their presence appears to impair the effectiveness.

8. Piperic acid itself is devoid of insecticidal activity.

9. Twenty-five previously unreported amides of piperic acid and 22 new piperic acid esters are described with their analyses.

◆

Diameter of Derris Roots

Chemical examination of Derris elliptica roots from various parts of the British Empire resulted in the evaluation of roots of varying diameters. The results indicate that usually the thinner roots are richer in rotenone and extract than thick ones, and thereby support the opinion generally held in this matter. At the same time the figures show evidence that in the case of some samples of roots such as those from St. Lucia and the Seychelles, the very fine rootlets are not as rich as those which are somewhat thicker but can still be classified as thin roots. For any one sample except for Uganda roots, the ratio of rotenone to extract content is roughly constant for roots of different thicknesses. G. T. Bray. *J. Soc. Chem. Ind.* 63, 384 (1944).

◆

Mosquito Deterrent

While repellents have been improved and such new ones as dimethyl phthalate, "Indalone" and "Rutgers Formula 612," are now in wide use, they all have drawbacks: Each individual of a group must apply the repellent, which affects delicate parts of the human skin and is greasy and irritating to many persons. An alternative for protecting large gatherings of people is to use kerosene-pyrethrum sprays containing 0.07 per cent of pyrethrins. J. M. Ginsburg. *J. N. Y. Entolmol. Soc.* 52, 247-54 (1944).

Development of MYL Louse Powder

Although DDT has for the past year or more been given the major share of the credit for louse control in World War II, it should not be overlooked that even before DDT was called to the attention of the Army a louse powder, for Army use, MYL, based on pyrethrum, had already been developed and was in wide use. The development work on MYL is summarized in a report outlining the general testing procedures and summarizing the results which led to the recommendation of the powder for use by the armed forces. The work was conducted at the Orlando, Fla., laboratory of the Bureau of Entomology & Plant Quarantine, U. S. D. A., beginning in the spring of 1942.

Test methods used in the laboratory evaluation of insecticides for the body louse are described. These include procedures for beaker tests, arm-and-leg tests, ovicide tests, and tests on grossly infested men.

The development of an effective louse powder for use by the armed forces is described. The louse powder, the MYL formula, consists of 0.2 per cent of pyrethrins as a toxicant, 2.0 per cent of IN-930 as a synergist, 0.25 per cent of Phenol S as an antioxidant, and 2.0 per cent of 2,4-dinitroanisole as an ovicide, with pyrophyllite as an inert diluent. It was established that this powder does not readily deteriorate even under unfavorable storage conditions.

Laboratory comparisons by the arm-and-leg method and tests on grossly infested men showed the MYL formula to be a superior louse powder. This powder, uniformly applied over the entire inner surface of winter underwear worn by heavily infested men at a dosage of 30 grams per suit killed all body lice present at the time of treatment. It also killed all eggs with which it came in contact, and gave complete protection against introduced lice for at least a week.

The MYL powder was also found to be an effective control for head lice and crab lice. It is also being employed successfully by troops in war theaters against other important insects, such as fleas, bedbugs, and ants.

R. C. Bushland, L. C. McAlister, Jr., G. W. Eddy, Howard A. Jones and E. F. Knipling, "Development of a Powder Treatment for the Control of Lice Attacking Man," *Journal of Parasitology*, December, 1944, Vol. 30, No. 6, pp. 377-387.

Underwear Impregnation

In a study of the effectiveness of the impregnation of underwear with pyrethrum extract as a means of controlling lice affecting human beings, both heavy and light weight underwear were treated, by spraying and dipping, with various concentrations of pyrethrins and the synergist N-isobutylundecyleneamide and in some cases the antioxidant phenol S.

In arm and leg tests practically all lice introduced four weeks after treatment with concentrations of pyrethrins as low as 0.05 per cent with 2 per cent of N-isobutylundecyleneamide were killed in forty-eight hours. Whole suits of underwear impregnated with as little as 0.28 Gm. of pyrethrins with N-isobutylundecyleneamide controlled lice introduced six weeks after treatment. Suits were still effective when worn after being stored for ten months. The antioxidant seemed to be of little value in maintaining the effectiveness of the treatments. Garments impregnated with equal doses of pyrethins by dipping and by spraying appeared to be equally effective in controlling lice. A few applications of pyrethrum and N-isobutylundecyleneamide in methylphthalate to a part of the garments did not appear satisfactory.

These tests have demonstrated the pediculicidal effectiveness of pyrethrum and N-isobutylundecyleneamide when impregnated in underwear. Although the supply of pyrethrum has been too critical to permit its use in this way the studies show that impregnation of clothing may be a valuable supplement to the powder treatment in control of lice, and they have led to further work with other pediculicides.

Howard A. Jones, L. C. McAlister, Jr., R. C. Bushland and E. F. Knipling, "Experimental Impregnation of Underwear with Pyrethrum Extract for Control of Body Lice," *War Medicine*, November, 1944, Vol. 6, pp. 323-326.

Develop New Army Lousicide

A new formula (designated in the laboratory as SYLN) has been developed for louse control, and is now in use by the U. S. Army as a step in one of its delousing procedures. The formula includes benzyl benzoate, pyrethrins, N-isobutylundecyleneamide, 2, 4-dinitroanisole and ethyl alcohol. Benzyl benzoate was selected for its scabicidal and solvent properties. Dinitroanisole was incorporated in the formula mainly for its ovicidal properties, although it is also a good pediculicide. The value of the synergist, N-isobutylundecyleneamide, is to increase the pediculicidal effect of the pyrethrins. Ethyl alcohol, besides acting as a vehicle for the spray, also serves as a mild counterirritant and germicide. Tests indicated the product to be effective as a pediculicide and to possess residual toxicity as well. Its application in the treatment of scabies is also stated to be encouraging. Gaines W. Eddy, "A Treatment for Head Lice, Crab Lice and Scabies," *War Medicine*, Nov., 1944, Vol. 6, pp. 319-322.

Sprayer Mfr. Makes War Tools

Food Machinery Corp., San Jose, Calif., in peace time the manufacturer of "Bean" high pressure spray pumps for spraying and dusting insecticides, and "Peerless" pumps for industrial purposes, has made an important contribution to the various amphibious operations of the U. S. Army, including the crossing of the Rhine, by its help in designing and manufacturing the "Water Buffalos" used in these invasions. These amazing steel-clad land and water ferries, which have been effectively used to transport both troops and material under fire, were designed by Food Machinery Corp. in cooperation with the Bureau of Ships.

Correction

It has been called to our attention that in publishing the paper "The Formulation of Phenolic Disinfectants" by Paul A. Wolf of the Dow Chemical Co. in our April, 1945, issue, a mistake was made in the statement "2-Chloro-4-phenylphenol (table 7), on the other hand is activated to a marked degree." The word "activated" should read "inactivated."

Ready Mixed Ready to Use

PER-MO RAT-BITS

MADE WITH
FORTIFIED RED SQUILL
KILLS RATS, MICE, MOLES
NON-POISONOUS
TO HUMANS, PETS, DOMESTIC ANIMALS
MAKE BIG MONEY
SELLING PER-MO BITS

Every Home and Business wants this SAFE-TO-USE, effective RED-SQUILL rat bait. SELL it under our name or YOUR OWN NAME. You'll sell it FAST in BIG AMOUNTS. It does its job—Steady CASH for YOU! Order your supply today!

PACKED IN 3 oz., and 16 oz. paper cans, or in bulk.

☆ ☆ ☆

PER-MO

2 WAY RAT AND MICE LIQUID

USE AS A DRINK OR MIX WITH FOOD BAIT

Rats and mice destroy over $200,000,000.00 worth of food stuffs and property in the U. S. every year.

One pair of rats breed from 6 to 10 times a year and can produce 1,200 descendants in one year.

☆ ☆ ☆

PER-MO
Mothproofing Liquid

THE GUARANTEED MOTHPROOF LIQUID.
DRY CLEANING HAS NO EFFECT ON
PER-MO MOTHPROOF TREATMENT.

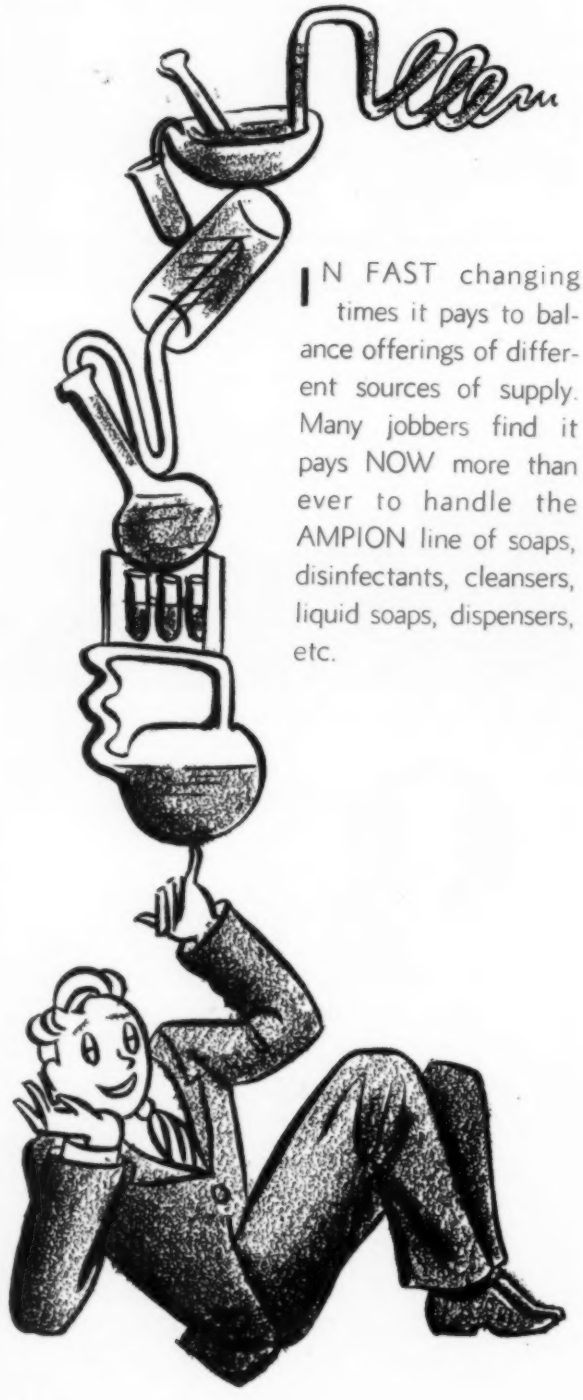
AS PER-MO HAS NO ODOR AND WILL NOT SPOT OR STAIN, IT APPEALS TO THE PUBLIC DUE TO THE FACT THAT IT CAUSES NO INCONVENIENCE WHILE MOTH-PROOFING FURNITURE, RUGS OR CLOTHING IN THE HOME, APARTMENT OR HOTEL ROOM.

☆ ☆ ☆

LITERATURE AND FULL PARTICULARS FIRST LETTER ON THESE 3 PROFITABLE PER-MO ITEMS.

PER-MO MOTHPROOF CO.
3729 B VIRGINIA AVE. KANSAS CITY 3, MO.

BALANCE



IN FAST changing times it pays to balance offerings of different sources of supply. Many jobbers find it pays NOW more than ever to handle the AMPION line of soaps, disinfectants, cleansers, liquid soaps, dispensers, etc.

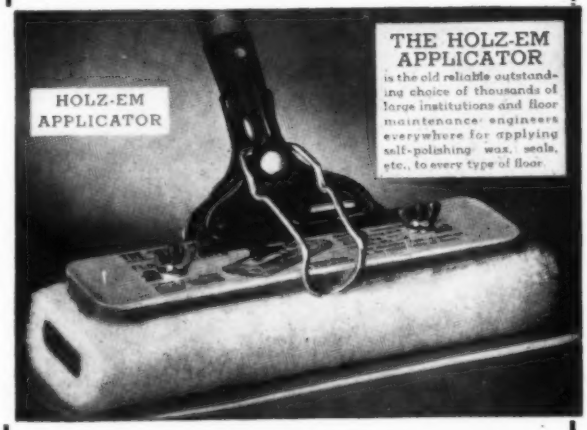
AMPION CORPORATION

4-88 47th Avenue Long Island City, N. Y.

AMERICAN STANDARD APPLICATORS

- Profitable to use
- Profitable to sell

Don't risk inferior results by selling or using cheap applicators. American Standard products are designed by floor maintenance experts. Only the finest workmanship and materials are combined in their manufacture.



The HOLZ-EM solves the problem of convenient and proper application of floor waxes, seals and varnishes. You can be sure that your products are being used correctly by selling or recommending the HOLZ-EM WAX APPLICATOR to do the job. The HOLZ-EM will help build your list of satisfied customers just as it has for others who are already familiar with the product.

Simple — Practical — Durable — Inexpensive

The 4 in 1 Applicator consists of but three parts:

1—A top quality sleeve-like wool pad;
2—A one piece hardwood block that needs no bolts, no nuts, no metal fastenings of any kind;
3—A long strong threaded handle.

The 4 in 1 is the ONLY applicator that provides FOUR WORKING SURFACES.

Both the HOLZ-EM and 4 in 1 applicators are the unanimous choice of floor maintenance experts throughout the nation.

WRITE FOR FURTHER DETAILS.

AMERICAN STANDARD MFG. CO.

Manufacturers of America's Outstanding Line of
Wet Mops — Dust Mops — Wax Applicators

2509-2513 South Green Street Chicago 8, Illinois

FEDERAL RUBBER BURN CLEANER & REVIVER

FOR REMOVING
STUBBORN RUBBER BURNS
from Gymnasium - Bowling Alley - Sealed Wood - Linoleum - Cement - Tile, etc.

Here is what one customer says:

"Your product has met with very good reception by our customers. We called, so far, on twenty-two schools, and all of them purchased a quantity of the cleaner. It is meeting a real need in our schools."

•

With the new types of rubber soles and heels made from synthetic and adulterated rubber, rubber burns, caused by sliding and sudden stops on gym, class room and other floors, are more prevalent and very pronounced. These unsightly marks are difficult to remove with cleaners that were developed to remove rubber burns caused by pre-war rubber soled shoes. Federal has met this problem. Federal Rubber-Burn Cleaner removes rubber burns from sealed wood, linoleum and concrete floors quickly, efficiently and without special effort. This product is needed by gyms, bowling alleys and schools from coast to coast.

Increase Your Sales—
There is a Big Demand

Send for Literature

FEDERAL VARNISH CO.

FLOOR FINISH DIVISION

Dept. 645 331-337 S. PEORIA ST.
CHICAGO 7 ILLINOIS

TRADE NEWS . . .

Dr. Harold Shepard to Cornell

Dr. Harold H. Shepard on April 1, 1945 became Insect Toxicologist of the New York State College of Agriculture, Cornell University, Ithaca, New York. He succeeded Dr. Roy Hansberry who joined the staff of the Shell Development Company, Modesto, Calif. in August, 1944. Dr. L. B. Norton, insecticide chemist, formerly at the Geneva Experiment Station, is now stationed at Ithaca and will be associated with Dr. Shepard in insecticide research. Dr. Shepard was for some years on the staff of the University of Minnesota at University Farm, St. Paul, but had been on leave of absence to work with the Office of Materials and Facilities, War Food Administration in Washington, D. C., since July 1943.

West Disf. Add New Building

Work has been started on a new two-story building for West Disinfecting Co., Long Island City, N. Y., it was learned early last month. The plot was acquired from City Bank Farmers Trust Co. and is on the block bounded by Jackson Ave., West St., Diagonal St., and the Long Island Railroad in the Bridge Plaza section of Long Island City.

Thompson to Join Prentiss

Friar Thompson, Jr., for the past seventeen years associated with the Hercules Powder Co., Wilmington, in the development of insecticide and disinfectant raw materials for the Naval Stores Division, will become manager of the Insecticide Department of R. J. Prentiss & Co., New York, on July 1, according to an announcement by Richard Prentiss, president of that company. The Prentiss company has been an important factor in pyrethrum, rotenone, squill and allied products for a number of years.

Mr. Thompson is a graduate of the University of Georgia in horticulture, also having engaged for several years in post-graduate entomological work at Rutgers University where he received his MS degree. He has been active in the affairs of the National Association of Insecticide & Disinfectant Manufacturers during his association with Hercules, and has been a member of the Board of Governors for the past two years.

FRIAR THOMPSON

Join Sanitary Supply Assn.

New members of the National Sanitary Supply Association, announced by Executive Secretary Leo J. Kelly, include: J. H. Jackson, vice president and general manager, Rubon Woodfinishing & Products Co., Kansas City, Mo.; Jack Jackson, Bancroft Paper Co., Shreveport, La.; Arnold J. Thomsen, Thomsen Chemical & Supply Co., Davenport, Ia.; Benet Costa, Kills 'Em Chemical Co., Honolulu, T. H.

Prentiss Buys Newark Plant

A group of buildings, comprising approximately 85,000 square feet of floor space, were purchased on a tract of about five acres of land by R. J. Prentiss & Co., New York, in Newark, N. J., it was announced early last month. The property fronting 275 feet on Doremus Ave., extends approximately 600 feet deep to the Passaic River. Riparian rights are included in the sale and the company plans to improve dock facilities so that import shipments may be delivered by water to their own dock. The plant is also served by a siding on the Central Railroad of N. J. The acquisition of the Newark property by the company, which was founded in 1927 by Richard J. Prentiss, active head of the concern, is an expansion move. The company will continue to retain and operate its 80,000 square foot plant at 261 King St., Brooklyn.

Earl Brenn, Huntington V. P.

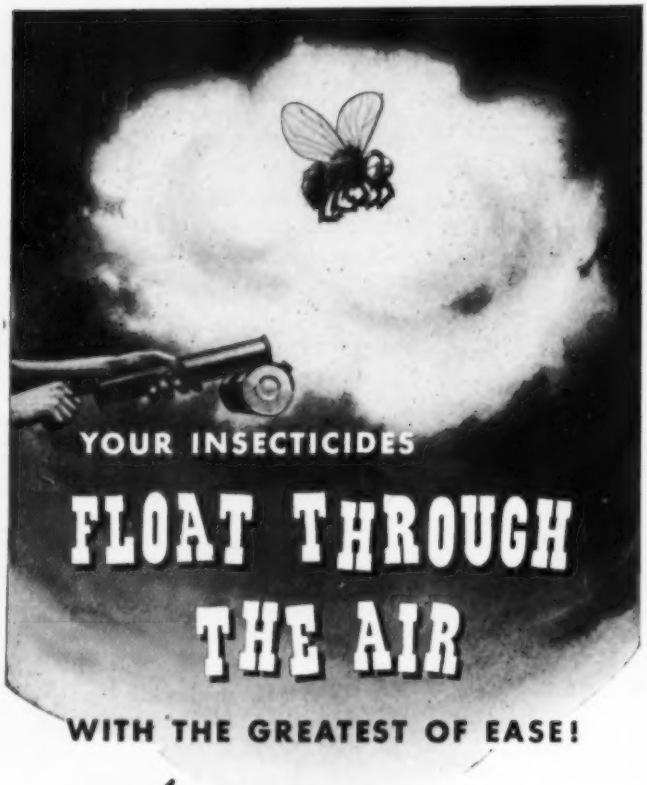
Earl Brenn, son of J. L. Brenn, president of the Huntington Laboratories, Inc., Huntington, Ind., has been elected vice-president of that company and will act as general assistant to the president. For the past five years, Earl Brenn has been connected with the Huntington Laboratories, Inc. plant at Denver, Colo., recently being transferred to the main office at Huntington. He is a graduate in chemical engineering from the University of Michigan, class of 1939.

New N.A.I.D.M. Members

The National Association of Insecticide and Disinfectant Manufacturers, has just announced the election to membership of O. E. Linck Co., 51 James St., Montclair, N. J. and W. H. Bull Co. 1950 No. 11th St., St. Louis. Cuts of the N.A.I.D.M. membership emblem are now available and may be obtained through the association office for one dollar each, the association states.

Bulletin Discusses DDT

Baldwin Laboratories, Saegertown, Pa., have just issued a 5¾ x 3¼ inch booklet: "Are You Sûre You Want Insecticide Containing DDT Now?". The booklet is a reprint of the complete text of a United States Department of Agriculture bulletin that summarizes test work done on DDT insecticides over the past two years. It contains findings and recommendations on the use and application of DDT insecticides. The toxicity of DDT, its effectiveness against some pests and not others, and the incompleteness of experimental data in the use of DDT are covered in this 12-page booklet.



WITH THE GREATEST OF EASE!

when

PENN-DRAKE INSECTI-SOL

IS USED AS A BASE!

The longer your insecticide floats through the air, the longer the *killing power* is effective.

Choose INSECTI-SOL for YOUR insecticide to provide the longer killing power and for a perfect base that is crystal clear, odor-free—and WILL NOT STAIN CLOTHING, DRAPES, RUGS, etc., because it evaporates *entirely* when its job is done!

Write Dept. 108 for "case histories" in which INSECTI-SOL has played an important role in building more successful insecticide business.

Mothicides, too—Penn-Drake Odor-Free Naphtha is an ideal base for Mothicide preparations.

penn drake petroleum products

PENNSYLVANIA REFINING COMPANY
General Offices: BUTLER, PA.
Refineries at KARNS CITY and TITUSVILLE, PA.
Makers of White Oils (U. S. P. and Technical); Petrolatums (all grades and colors); INSECTI-SOL (deodorized insecticide base); Odor-Free and other Naphthas; Petroleum Sulphonates; Waxes; Industrial and Motor Lubricants and Greases; Fuel Oils and other petroleum products.

Safer Floors at Less Cost

All strands of Sun Ray Woolers are radially placed so that they constantly rotate at right angles to the work. This patented feature means quicker removal of excess wax and more efficient hardening of the wax film. The resulting finish is virtually slip-proof.

Sun Ray Woolers clean, dry-scrub and polish in one operation, regardless of whether the floor is wood, linoleum, rubber or mastic. They can be successfully used with a fibre brush on all disc-type floor machines. You'll save time and money with Sun Ray Woolers!

Simply lay the Sun Ray Wooler on the floor, tilt the machine and wheel it into position over the wooler, allowing brush to rest centrally on the pad. That is all there is to it—with *any* disc-type floor machine.

Sun Ray

Steel Wool Products

THE WILLIAMS COMPANY, LONDON, OHIO

The Williams Company, London, Ohio SS 6
Send literature showing how Sun Ray's radial strands save time and money and make floors safer.

*Name*_____

*Institution*_____

*Street*_____

*City & State*_____

Plan N.Y.C. Sanitary Code Changes

Notice of a proposal by the New York City Department of Health to amend Section 104 of the Sanitary Code covering regulations governing the use of fumigants, exterminators and insecticides was received by the Drug, Chemical and Allied Trades Section of the New York Board of Trade, May 21. A hearing on the matter was to be held May 23, but the chairman of the legislative committee of the Section requested a postponement to have sufficient time to study the matter.

Baird & McGuire House Organ

Coal-tar, its origin and derivatives, are described in an article in the second issue of a new house organ, "Chemi-notes," of Baird & McGuire, Inc., Holbrook, Mass. The new 8-page house organ is 5 x 7 inches and in addition to a feature article contains a page of comment and an editorial page. The remainder of the paper is devoted to information about Baird & McGuire products.

Set Gulf Sprayer Prices

Maximum prices for resale by Gulf Oil Corp., Pittsburgh, its jobbers and retailers of the "Gulf Sprayer" manufactured by American Specialty Co., Amherst, Mass., three manufactured by H. D. Hudson Mfg. Co., Chicago and one sprayer manufactured by Acmeline Mfg. Co., Traverse City, Mich., were set by the OPA recently. The action was taken through amendment No. 2 to Supplementary Regulation 14J.

McCormick Management Plan

How "multiple management" and its instrumentality, junior boards of directors, have worked out successfully at McCormick & Co., Baltimore, since Charles P. McCormick became president and put these advanced ideas into practice is told in the April 20, issue of *Printer's Ink*. Mr. McCormick, who was recently reelected to a directorship in the U. S. Chamber of Commerce, instituted the idea of "multiple management" when he succeeded his uncle, Willoughby M. McCormick as president of McCormick & Co., in 1932. As a result the company has reduced its work week by 16 hours, made more money each year since the plan was put into effect, cut absenteeism,

CHARLES P. McCORMICK

paid higher wages than any other company in the food industry in the area, established group insurance and sick benefit plans and set up a profit sharing trust agreement that gives a lump sum in cash to every employee at retirement.

Suggests Foreign Language Labels

Leo J. Kelly, executive secretary, National Sanitary Supply Association, Chicago, has an idea that ought to sell more sanitary products or at least be helpful when they are put to use. A large percentage of the cleaning help employed in Chicago, Mr. Kelly has discovered, are of Polish extraction and read very little English. Manufacturers in large city areas, says Mr. Kelly, could help the distributor and make friends for his product by issuing instructions in Polish or in the predominant language for the area served.

DCAT Hears Ives

Approximately 400 members and guests of the Drug, Chemical and Allied Trades Section of the New York Board of Trade heard Hon. Irving M. Ives, majority leader of the New York State Assembly, discuss New York State's Anti-Discrimination Law, at the Section's luncheon meeting at the Waldorf-Astoria Hotel May 17.

Clarify DDT Story

The March-April, 1945, issue of the *Du Pont Magazine*, published by E. I. du Pont de Nemours & Co., Wilmington, carries an article entitled "What About DDT?" which attempts to answer some of the common questions and to clear up some of the common misconceptions about DDT. It is pointed out that DDT is not, as generally supposed, an "all-purpose" insecticide, nor is it a finished product ready for consumer use. Neither, says the author, is there reason for believing that the same type products which have been used by the army will be suitable for peace-time civilian use.

"The ease of compounding DDT insecticides has been over-simplified by some popular writers," he says. "Readers have been led to believe that DDT can be dissolved in water and applied at will. The fact is, for all practical purposes, unmodified DDT is insoluble in water. However, it can be reduced with many organic solvents. It can also be modified by the use of chemical conditioners to permit its use as water suspensions and emulsions for spray application. The point to be underscored is that the public will have little or no facilities for using DDT, in its pure form.

"Another point needs clarification. Readers have been told that all insects are killed immediately on making contact with any surface treated with a DDT insecticide, and that the potency of the product remains undiminished for several weeks after application. Experimental tests have demonstrated that this is true in some cases and with some insects, but not in all cases and with all insects. The claims made by some over-enthusiastic writers have been broader than the facts upon which they were based."

Sterilization of Gums

An importer of vegetable gums such as gum arabic, gum karaya, gum tragacanth, etc., is interested in locating a concern which might be equipped to sterilize these products before sale. We shall be glad to forward to this importer the name of any qualified concern.

New 1945 OTI Available

The new 1945 Official Test Insecticide is now available and should be used for all current testing of insect sprays by the Peet Grady Method, according to an announcement by H. W. Hamilton, secretary of the National Association of Insecticide & Disinfectant Manufacturers. The new 1945 O.T.I. is official for testing during the period from June 1, 1945 through May 31, 1946. O.T.I. of 1944 or any previous year expired for official testing on May 31 just past. The 1945 O.T.I. is packaged in six-ounce amber bottles, six to the carton, with distinguishing orchid-tinted label. The new 1945 product, as in previous years, is pyrethrum extract in a petroleum solvent approximating 0.1 grams of total pyrethrins per 100 cc. Current O.T.I. supplies can be obtained only from the NAIDM office, 110 East 42nd St., New York. Cost is $6.00 per dozen, single bottles $1.00 each, plus shipping charges.

A new type experimental test insecticide of higher strength is now being tried out in a cooperative research project under the auspices of the Insecticide Scientific Committee of NAIDM of which Frank Nelson of Stanco, Inc., Bayway, N. J. is chairman. The new experimental material contains approximately 0.160 grams of total pyrethrins per 100 cc. Its distribution thus far is confined solely to those laboratories cooperating in the research project.

S. J. Bockstanz, head of Bockstanz Bros. Co., Detroit, and president of the National Sanitary Supply Association, receiving the Air Medal on behalf of his son, Lt. Bruce K. Bockstanz, USAAF, from Col. Bradford A. Shaw, at formal ceremonies recently at Selfridge Field, Mich. Lt. Bockstanz is reported to be a prisoner of war. The citation accompanying the award states: "For meritorious achievement while participating in heavy bombardment missions in the air offensive against the enemy over Continental Europe. The courage, coolness and skill displayed by this officer upon these occasions reflect great credit upon himself and the Armed Forces of the United States."

North Central Entomologists Meet

Following the recent meeting of a group of entomologists from the North Central States at Purdue University, a decision was made to form a permanent organization to be known as the North Central States Entomologists Association. Prof. J. J. Davis of Purdue University was elected president of the association, and M. D. Farrar of the Illinio Natural History Survey was named secretary. A mail ballot is being taken to determine whether or not the new organization will seek admission as a branch of the American Association of Economic Entomologists. It has been announced that the 1946 meeting of the group will be held at the University of Illinois, Urbana, Ill.

The major topics discussed, and the discussion leaders at the recent conference were as follows: Chinch Bug, George C. Decker; European Corn Borer, W. G. Bradley; Vegetable Garden Insects, Ray Hutson; Codling Moth, L. F. Steiner; Insecticides and Appliances, Harold Waters.

New Plant Insecticide

A new insecticide known as "Salp" has been announced by The Apex Chemical Company of Elizabeth, N. J. The active principle is sodium antimony lactophenate. Although toxic, it is suitable for both outdoor and indoor use. It has proved successful against thrips, leaf rollers and other chewing insects affecting roses, gladioli, dahlias and similar flower plants. The material is in liquid form and can be used during hot dry periods. It does not deteriorate on long storage.

Standard Synthetics 1945 Catalog

Standard Synthetics, Inc., New York, issued their 1945 catalog and price list of essential oils, aromatic chemicals, flavors and perfume bases, the company announced last month. This year's 32-page catalog contains a brief history of the company which was founded by John Leslie Hindle, president, in London, in 1923. Copies are available to interested persons on written request.

Dithane Potato Blight Control

Potato yield in the Homestead, Florida, area during the season just closed averaged 350 bushels per acre as against a normal yield of 200 bushels per acre as a result of control of the late potato blight by use of a "Dithane" spray, according to the Subtropical Experiment Station at Homestead. From 6,000 acres of potatoes sprayed to control the fungus, growers harvested 350 bushels per acre or about 75 per cent more than the normal average for the area, the report states. "Dithane" is an organic fungicide manufactured by Rohm & Haas Co., Philadelphia, especially used to control potato blight.

Vogel-Ritt Opens Chicago Office

Vogel-Ritt, Inc., Philadelphia pest control operators, have just announced the opening of a new branch office at 174 W. Jackson Blvd., Chicago 4. David M. Wiesen, Sr., will be manager and David M. Wiesen, Jr., will be assistant manager. Both Wiesens have been connected with the company for a number of years, the father lately district manager for the Upstate Pennsylvania office and his son as former manager of the Trenton, N. J. office.

Conn. P.C.O.'s Hear Pomerantz

Charles Pomerantz, of Bell Exterminating Co., New York, was the principal speaker at the annual dinner meeting of the Connecticut Pest Control Association, April 23, held at the City Club, Hartford. Mr. Pomerantz' subject was: "Why a PCO's Conference?" In addition, a film, "The Insect and Rodent Enemies of Man," was shown through the courtesy of Harry Turrie of Wil-Kil Pest Control, Milwaukee. Other speakers included: Tom Mahon, representing the National Pest Control Association in the absence of William O. Buettner, secretary; F. E. Bohman, The Birchard System, Inc., Hartford; George Elliott, Ransford Insecticide Co., Worcester, Mass., and Dr. C. P. Alexander of Massachusetts State College. There were about 35 guests and members present.

Test "Lethane B-71" Four Yrs.

"Lethane B-71," a synthetic insecticide being recommended as a replacement for war-scarce pyrethrum, rotenone and nicotine sulphate, has undergone four years of field testing on tomato, pea, bean, spinach and cabbage crops by large growers and state experiment stations, it was stated recently. Developed by Rohm & Haas Co., Philadelphia, this synthetic insecticide has been tested in such important truck crop areas as Long Island, Minnesota, Maine, New Jersey, eastern Pennsylvania, Florida, Texas and California. A chart showing a rough comparison between the leading contact insecticides and "Lethane B-71" is also being distributed by the company.

Something new in the way of moth-proofing compounds is "Hex", a new liquid insecticide just brought out by the White Tar division of Koppers Co., Kearny, N. J. "Hex" is said to be odorless and non-inflammable. It comes in pint and quart sizes and can be applied by merely brushing on.

Expect Heavy Chinch Infestation

A good market for creosote and dinitro dusts is in prospect in many midwestern and some southern states, this summer, if winter surveys indicating heavy infestations of chinch bugs are borne out. Agricultural experts have warned farmers in Illinois, Missouri, Arkansas, Kansas, Nebraska, Ohio, North Carolina and Oklahoma to be prepared for serious damages from this pest. Dry spells in June and July will favor crop injury, the specialists say, while rains, on the other hand, will simplify the farmers' problem. Supplies of the insecticides were being organized early in May, according to reports from the midland areas.

NEW PATENTS

(*From Page 79*)

the soap being 10 to 30 parts for 100 parts of the wax composition, the pH of the said base being about 8 to 10.5, both the wax and the dispersed soap phase being in solid condition, and the composition being marketable without the use of a liquid-tight container and, when melted and stirred with warmed additional water, undergoing inversion of phase, to form a free-flowing dispersion constituting a self-polishing composition.

Phenothiazine Mix Aids Cattle

From the results secured in two seasons of experimental work, it appears that giving phenothiazine-salt should prove valuable in controlling parasitism in beef cattle or in dairy animals not milking wherever the animals will voluntarily eat enough of the mixture, according to a release on the subject just received from Dr. Hess & Clark, Inc., Ashland, O. In addition, according to the release, which was based on tests conducted on the Hess and Clark research farm in Ashland County, O., during the grazing season of 1943 and 1944, steers on pasture getting phenothiazine outgained steers getting only salt.

SPRAYER COMMITTEE MEETS

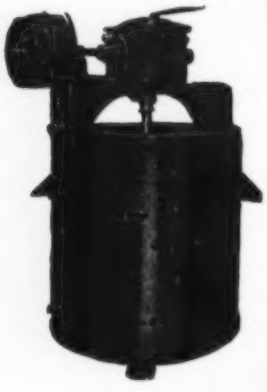
(*From Page 49*)

sprayers. Industry members expressed the opinion that many of these orders might be duplicates. Against this demand, controlled materials were allocated during the last year to the industry for production of approximately 7,000,000 household sprayers.

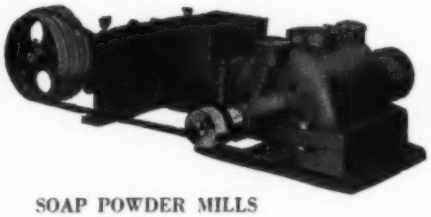
Use of low-content (generally 30 per cent) tin solders now permitted the industry under the tin conservation order (M-43) was described by some committee members as resulting in waste, because of the high percentage of rejects requiring extra man-hours and materials for reprocessing. The representative of WPB's Tin, Lead and Zinc Division asked manufacturers to present specific figures substantiating this statement, as he felt that skill in application of low-content solders would raise the production rate.

Members of Household Insecticide Spray Gun Industry Advisory Committee are: George A. Arehart, University Metal Products Co., Saranac, Mich.; C. P. Davis, American Device Mfg. Corp., New York, N. Y.; Edward E. Davis, R. E. Chapin Mfg. Works, Inc., Batavia, N. Y.; R. C. Hudson, H. D. Hudson Manufacturing Co., Chicago, Ill.; J. L. Novak, Acmeline Manufacturing Co., Traverse City, Mich.; H. N. Ricket, American Specialty Co., Amherst, Ohio; V. A. Snell, Lowell Mfg. Co., Chicago, and Wm. Martin Vogel, Standard Container, Inc., Montclair, N. J.

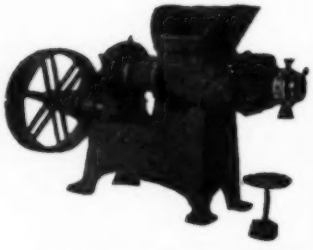
Special Offerings of **SOAP MACHINERY** *Completely Rebuilt!*



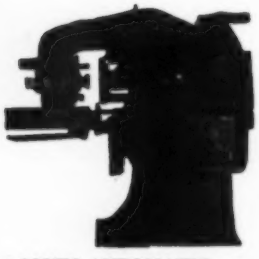
Newman's BRAND NEW Steel Steam Jacketed SOAP CRUTCHERS Sizes 1,000 to 10,000 lbs.



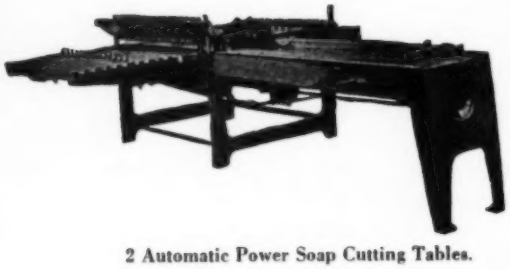
SOAP POWDER MILLS
Sizes 10A and 14



Single screw soap plodders with 6, 8, 10 or 12 inch screws. All completely rebuilt and unconditionally guaranteed.



4 JONES AUTOMATIC combination laundry and toilet soap presses. All complete and in perfect condition.



2 Automatic Power Soap Cutting Tables.

INVESTIGATE THESE SPECIAL BARGAINS

•

Johnson Automatic Soap Chip Filling, Weighing and Sealing Machines for 2 lb. and 5 lb. Packages guaranteed in perfect condition.

•

ADDITIONAL REBUILT SOAP MACHINERY

All used equipment rebuilt in our own shops and guaranteed first class condition.

H-A, 1500, 3000, 4000, 5000 lbs. capacity. Steam Jacketed Crutchers.
Dopp Steam Jacketed Crutchers, 1000, 1200, 1500 lbs. and 800 gals. capacity.
Ralston Automatic Soap Presses.
Scouring Soap Presses.
Empire State, Dopp & Crosby Foot Presses.
2, 3, 4, 5 and 6 roll Granite Toilet Soap Mills.
H-A 4 and 5 roll Steel Mills.
H-A Automatic and Hand-Power slabbers.
Proctor & Schwartz Bar Soap Dryers.
Blanchard No. 10-A and No. 14 Soap Powder Mills.
J. H. Day Jaw Soap Crusher.
H-A 6, 8 and 10 inch Single Screw Plodders.
Allbright-Nell 10 inch Plodders.
Filling and Weighing Machine for Flakes, Powders, etc.
Steel Soap frames, all sizes.
Steam Jacketed Soap Remelters.
Automatic Soap Wrapping Machines.
Glycerin Evaporators, Pumps.
Sperry Cast Iron Square Filter Presses, 10, 12, 18, 24, 30 and 36 inch.
Perrin 18 inch Filter Press with Jacketed Plates.
Gedge-Gray Mixers, 25 to 6000 lbs. capacity, with and without Sifter Tops.
Day Grinding and Sifting Machinery.
Schultz-O'Neill Mills.
Day Pony Mixers.
Gardiner Sifter and Mixer.
Proctor & Schwartz large roll Soap Chip Dryers complete.
Doll Steam Jacketed Soap Crutchers, 1000, 1200 and 1350 lbs. capacity.
Day Talcum Powder Mixers.
All types and sizes—Tanks and Kettles.
Ralston and H-A Automatic Cutting Tables.
Soap Dies for Foot and Automatic Presses.
Broughton Soap Powder Mixers.
Williams Crutcher and Pulverizer.
National Filling and Weighing Machines.

Send us a list of your surplus equipment— we buy separate units or complete plants.

NEWMAN TALLOW & SOAP MACHINERY COMPANY

1051 WEST 35th STREET, CHICAGO — Phone Yards 3665-3666

Our Forty Years Soap Experience Can Help Solve Your Problems

PROFESSIONAL DIRECTORY

CLASSIFIED

Classified Advertising — All classified advertisements will be charged for at the rate of ten cents per word, $2.00 minimum, except those of individuals seeking employment where the rate is five cents per word, $1.00 minimum. Address all replies to Classified Advertisements with Box Number, care of *Soap & Sanitary Chemicals*, 254 West 31st St., New York 1.

Positions Open

Chemists with textile and detergent experience. Immediate openings available with established chemical company, permanent positions either sales-service or research departments. Excellent salary and chance for advancement now and postwar. Give complete details. Box No. 983, care of *Soap & Sanitary Chemicals.*

Executive Position Open—Opportunity for right man with well established house to act as Manager of Insecticide Department supplying basic ingredients to manufacturers of household and agricultural insecticides—technical background desired but not essential—experience and knowledge of trade necessary—position means good salary for right man — state all qualifications — send photograph if available—replies all kept confidential — our associates know of this ad. Box No. 984, care of *Soap & Sanitary Chemicals.*

Assistant to Sales Manager of aggressive maker of soaps and sanitation products. Chief duty will be hiring and training of men to sell industry and institutions. Must have outstanding record for reliability and result-getting. Splendid opportunity for first class man to grow with a live organization. Write fully, giving details of experience, age, salary and all other pertinent data. Our employees know of this ad. Address Box No. 986, care of *Soap & Sanitary Chemicals.*

Soap Maker: Established company in Northern New Jersey offers liberal salary and permanent position to experienced soap maker. State age and experience. Reply to Box No. 993, care of *Soap & Sanitary Chemicals.*

Wanted: Kettle man to manufacture potash liquid and paste soaps for an old established firm in Michigan. Extensive experience not necessary. A few months practical experience on kettle is all that is required. Post-war future with good wages to start. Address Box No. 987, care of *Soap & Sanitary Chemicals.*

Assistant Soap Maker: Young, active man wanted by Metropolitan New Jersey soap plant. Experience not as essential as willingness to work and learn. Thorough training will be given. Permanent position. Address Box No. 994, care of *Soap & Sanitary Chemicals.*

Executive with good sales record. Must have knowledge of manufacturing and packaging household detergents. State qualifications fully and salary required. Replies confidential. Address Box No. 995 care of *Soap & Sanitary Chemicals*

Positions Wanted

Soap Maker: Man with long practical experience in all types soap, glycerine, oils, fats, desires position handling manufacture or consulting one or two days a week. Preferably New Jersey or New York City. Address Box No. 985, care of *Soap & Sanitary Chemicals.*

Cosmetics: Chemist with 14 years wide experience in manufacture and research in cosmetics, perfumes, essential oils, and soaps, desires position with small progressive company in the East. His own extensive formulary available to employing manufacturer. For full details address Box No. 988, care of *Soap & Sanitary Chemicals.*

Position Wanted: Research entomologist, Ph.D., desires position with commercial concern in toxicology work. Excellent experience and references. Further information will be furnished by writing inquiries to Box No. 989, care of *Soap & Sanitary Chemicals.*

Plant Manager: Man with 20 years as soap plant manager in toilet soaps, shampoos, etc. desires new connection. Chemical engineer. Qualified to take full charge soap plant production. Address Box No. 990, care of *Soap & Sanitary Chemicals.*

Miscellaneous

For Sale: Powder Dispenser bellows type (patented), no metal used, very low production cost, low enough for one time proposition or otherwise. Address Box No. 996, care of *Soap & Sanitary Chemicals.*

Representation: California janitor and sanitary supply firm desires additional nationally advertised lines. We sell to schools, hospitals, etc. Paragon Supply Company, 622 Eye Street, Sacramento 14, Cal., George A. Button.

For Sale: Package Machinery Company Automatic Soap Wrappers; Lehman 3 Roll Water Cooled Soap Mill; H. A. 6 Knife Soap Chipper; Filters, Pumps; Fillers, Labelers; Tanks; Dryers; Mixers, etc. **Wanted:** your surplus equipment. Brill Equipment Company, 225 West 34th Street, New York 1, New York.

For Sale: Small soap factory. Good Inventory. Operated 34 years soap's, cleaner's, disinfectants, etc. Fine home on property. Owner has made real money. Why work for others. Address Box No. 991, care of *Soap & Sanitary Chemicals.*

Will Purchase Immediately — Pneumatic Packaging Machine, used for chips, powder, **cleanser;** also dry mixers, chip **dryers, crutchers, and automatic soap** press. Address Box No. 992, care *Soap & Sanitary Chemicals.*

English Manufacturer wishes to cooperate with American manufacturer of soap, polishes, etc. Old-established firm of great substance. No money required. Address replies to Box No. 478, Mason-Peacock Ltd., 184 Strand, London, W. C. 2, England.

Floor Brushes: We manufacture a very complete line. Catalogue sent upon request. Flour City Brush Company, Minneapolis, Minn., or Pacific Coast Brush Company, Los Angeles, Cal.

Wanted: Complete automatic filling, glueing and sealing machine to handle free flowing dry material consistency of Epsom salts. Size of package 4 x 2¾ x 1. Reply Blue Dew Corp., 2620 Main St., Buffalo, N. Y.

For Sale: Houchin 4" Single Screw Plodder, Motor Driven. Three Roll water cooled Mills, 12" x 30" and 16"x40". 11—Closed stainless steel tanks, 268 gals. each. National Acme Model C20, stainless steel Centrifuges. 800 ft. Ball Bearing Roller Conveyor, 12" and 15" widths. Soap Frames; Cutting Tables; Plodders; Stone Mills; Dryers; Chippers; Mixers; Powder Fillers; Grinders, Filter Presses; Disc Fillers; Pumps; etc. Send for latest Bulletin. We buy your surplus equipment for cash. Stein Equipment Co., 426 Broome St., New York 13, N. Y.

Issue Booklet on "Thanite"

The killing power of "Thanite," the synthetic fly spray concentrate of Hercules Powder Co., Wilmington, is more complete than that of pyrethrum, according to Bulletin 253 (technical No. 33), published recently by the University of Delaware. "The 'knock-down' exhibited by 'Thanite' is slightly slower but more complete than that of pyrethrum," it is stated in the 58-page booklet titled: "Development of a Terpene Thyiocyane Ester ("Thanite") as a Fly Spray Concentrate." It was written by Roger L. Pierpont, a research fellow in the department of entomology of the University of Delaware.

—•—

T. F. Currens, Norwich, Dies

Turner F. Currens, 65, retired vice-president and director of Norwich Pharmacal Co., New York, and a former official of the War Production Board, died May 23, in St. Vincent's Hospital, New York, after a two-week illness. He retired from the Norwich company in 1940, having been with the firm since 1904. In 1920 he was elected a director of the company and the following year was appointed vice-president. In 1941 Mr. Currens joined the Drug and Chemical Division of the WPB in Washington, as chief of the Botanical Drug Unit, remaining in that post until Sept., 1943.

INDEX TO ADVERTISERS

* For further details see announcement in 1945 SOAP BLUE BOOK

Every effort is made to keep this index free of errors, but no responsibility is assumed for any omissions.

Tale Ends

ONCE upon a time at an orphanage, a new little girl arrived. At her first dinner, apple pie was served for dessert. A motherly matron, noting the child was not eating her pie, asked her why. "I'm waiting for the cheese," answered the orphan. All of which reminds us very much of WFA requesting bids for 12,000,000 cakes of wrapped toilet soap for relief shipment abroad.

* * *

As soon as Philippines copra is ready to be shipped and turned into coconut oil, the new Copra Export Management Co., formed by FEA, will be ready to operate. And how American soapers could use some of that coconut oil right now! But reports from the Philippines are not too rosy.

* * *

New York State is getting real tough on those who pack and use untinted fluoride insecticides. Under the state sanitary code, manufacturers, restaurants, etc. are being warned as enforcement of fluoride coloration enforcement becomes more active.

* * *

Pyrethrum stocks are piling up, piling up, piling up! And it is being put in storage. And household insecticide manufacturers hopes are again on the rise that before the year is out. . . .

* * *

A few soapers apparently knew all about the proposed cut last month in oil and fat quotas at least ten days before WFA officially announced the reduction. The rank and file of soap makers, however, were taken completely by surprise when the quota cut came. It's amazing how some people can find out what is going on at WFA and others can't, even when they try.

* * *

Advertising copy writers are finding a new way of annihilating the language, comments *The New Yorker* in a recent issue. They have uncovered the interesting observation that copy writers for competitive soap accounts now shun the verb "does" because they fear the prospect of plugging for "Duz."